

Saturday 26 March 2016

Amateur Photographer

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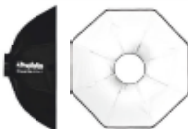
April showers

Why rainy spring days are great
news for landscape photographers

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It's that time of year again when the landscape comes alive with new growth, and as photographers we have a wealth of fresh opportunities to take photographs. But it isn't just the new growth that makes this time of year full of opportunity, as the light can be fantastic as well. It is still low enough in the sky to make the first and last few hours of the day look fantastic, with long shadows and a warm glow. While this might

be great for the landscape photographers among us, it has its benefits for other types of photography too, especially street photography. See how two photographers make the most of spring light on pages 20-25. And for those of us who like to get out in the garden, Paul Hobson has a great guide on what to build and plant now so that you have plenty of wildlife to photograph in your garden in the summer months. See pages 37-40.

Richard Sibley, deputy editor

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ONLINE PICTURE OF THE WEEK

Leaving the Nest by Matt Smart

Sony NEX-3, 18-55mm, 30secs
at f/25, ISO 200

AP reader Matt Smart uploaded this atmospheric image to our Flickr group. It shows what can be done with the right subject, weather conditions and a little patience.

Lone trees are a common subject in landscape photography and more often than not we find them standing solitary within sparse and lonesome landscapes. Here Matt has produced an image that is almost like a charcoal drawing, helped by the long shutter speed that has rendered the bank of grass and sweeping sky as a wash of wash of grey. To cap it off, he has succeeded in capturing another lone subject – the tick-shape of a bird taking flight from the canopy. It's a beautiful effect.



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NEWS ROUND-UP

The week in brief, edited by Chris Cheesman

iPhone deadline

The deadline for entries to the 9th Annual iPhone Photography Awards is 31 March 2016. Last year, dozens of amateur and professional photographers won Apple prizes for images captured using Apple iPhones, iPads and iPods. The categories are: animals, abstract, architecture, children, flowers, food, landscape, lifestyle, nature, news/events, panorama, people, portrait, seasons, still-life, sunset, travel, trees and others. Visit www.ippawards.com.



© IAN ALDER



Park Cameras event

Photographers can get their hands on the flagship Canon EOS-1D X Mark II DSLR at a free event hosted by Park Cameras, ahead of the camera's official launch in May. It's on at the Rathbone Place store in London on 31 March. Wildlife photographer Andy Rouse (above) will present test shots and videos that were used to help Canon develop the camera. Visit www.parkcameras.com/events.



Polaroid Brightsaber

Polaroid has launched a handheld LED 'lighting wand' called Brightsaber. The portable device, which can also be mounted to a tripod and remote-controlled, includes a rotating tungsten filter and 298 LED bulbs. Polaroid hasn't released a UK price, but Amazon is currently selling it for £129.99.

Leica phone tie-up

Leica has joined forces with Chinese mobile phone maker Huawei to 'reinvent' smartphone photography. Official details of the long-term 'strategic partnership' are scant, amid reports that Leica will make optics for Huawei smartphones. Leica says it will introduce its 'proven optical expertise into a new product segment'.



Portable beauty dish

Profoto has revealed a collapsible and more portable version of its classic Softlight Reflector. First released in 1980, it was nicknamed the Beauty Dish 'due to its ability to bring out the beauty of the model', says Profoto. Priced £144, it is designed to create a 'creamy yet crisp light'. Visit profoto.com.



© SHUTTERSTOCK/PHOTO BY ANDY ROUSE

WEEKEND PROJECT

Abstract architecture

Abstract architectural photography may seem like an esoteric art involving lots of specialist knowledge and expensive tilt-and-shift lenses, but with a bit of lateral thinking you can get good results with everyday gear.

Rather than equipment, the biggest requirement is an ability to see shapes and perspectives creatively.

You don't need to live next door to an amazing example of modern architecture, either. Most town centres have at least one or two interesting and striking buildings, while larger cities almost certainly will - be it the new Bullring in Birmingham or the redeveloped docks in Liverpool. As with landscapes, it's important to spend some time investigating the building from different perspectives before setting up your tripod and blasting away.

1 A telephoto lens can make otherwise mundane parts of a building look unusual. Wideangle lenses are great for getting in as much of the scene as possible, but ensure background clutter doesn't detract from your main subject.

2 Break the rules and don't worry about converging verticals. Spirals and other classic compositional devices can also work, so watch out for staircases, fire escapes and other features that create interesting graphic shapes.

BIG picture

Five-year anniversary of devastating disasters in Fukushima, Japan

◀ There's perhaps nothing more eerie than the aftermath of a disaster. With streets evacuated, homes empty and pavements peppered with dust and detritus, an area can take on a near-haunted quality. Here we see such an example from photographer Christopher Furlong – a lone house sitting on the scarred landscape, inside the exclusion zone, close to the devastated Daiichi Nuclear Power Plant in Namie, Fukushima, Japan. The area is now closed to residents due to radiation contamination from the Fukushima nuclear disaster. The fifth anniversary of the magnitude 9.0 earthquake and tsunami that claimed the lives of 15,894 was on 11 March. The subsequent damage to the reactors at the power plant still forces 99,750 people to live as evacuees away from contaminated areas.

Words & numbers

Photography is about capturing souls not smiles

Dragan Tapshanov
Photojournalist and blogger

2.1%

Rise in visitors at the National Media Museum, Bradford in 2015

PHOTOGRAPH BY CHRISTOPHER FURLONG © DRAGAN TAPSHANOV © NATIONAL MEDIA MUSEUM



3 However dramatic your building, the impact of the image will be reduced by a bland grey sky. Consider using an ND filter to bring out a bit of shape in the clouds, or beef up the skies in software, but don't overdo it.

A creative eye is the most important tool for this kind of image

4 While it's normally OK to photograph privately owned buildings from a public place in the UK, such as the street, you may get challenged if you stray onto land owned by the building. It may be worth asking permission first.


© PHIL HALL





Glass Tears
(Les Larmes)
1932

Tate to showcase Elton John's historic photos

 HISTORIC photographs drawn from the 7,000-strong private collection of Sir Elton John are to go on show at Tate Modern in London later this year.

The exhibition, due to open on 10 November, is billed as an unrivalled selection of classic modernist images from the 1920s to the 1950s. It will feature more than 150 works by over 60 artists, including Man Ray, Berenice Abbott, Edward Weston and Edward Steichen.

The show marks the beginning of a long-term relationship with Sir Elton John. The rock legend, who has built up the collection over the past 25 years, said: 'It is a great honour for David and I to lend part of our collection to Tate Modern for this groundbreaking exhibition.'

'The modernist era in photography is one of the key moments within the medium, and collecting work from this period has brought me great joy over the past 25 years.'

'Each of these photographs serves as inspiration for me in my life; they line the walls of my homes and I consider them precious gems.'

'We are thrilled to be part of this collaboration with Tate Modern and hope [visitors] experience as much joy in seeing the works as I have had in finding them.'

Commenting on the exhibition, called *The Radical Eye: Modernist Photography from the Sir Elton John Collection*, the gallery said: 'The exhibition introduces a crucial moment in the history of photography – an exciting rupture often referred to as the "coming of age" of the medium, when artists used photography as a tool through which they could redefine and transform visions of the modern world. Technological advancements gave artists the freedom to experiment and test the limits of the medium and present the world through a new, distinctly modern visual language.'

'This exhibition will reveal how the timeless genres of the portrait, nude and still life were reimagined through the camera, as well as exploring its unique ability to capture street life and the modern world from a new perspective.'

Tate director Nicholas Serota added: 'This will be a truly unique exhibition. There are few collections of modernist photography in the UK, so we are delighted that Sir Elton John has allowed us to draw on his incredible collection and give everyone a chance to see these iconic works.'



'Self Portrait', 1932, by Herbert Bayer, will be among over 150 images on show



Couples ditch pro photographers

 MORE than a third of UK couples do not plan to use a professional wedding photographer on their big day, turning instead to friends, relatives and GoPro cameras.

Thirty-six per cent of couples planning to wed do not want a professional photographer at their wedding, finds a poll of 1,000 UK consumers by Cheshire-based wedding venue Heaton House Farm. Professional wedding photography is 'in decline', the venue claimed.

Marketing manager Sarah Heath said the rise in editing apps has led to an increase in couples 'turning to skilled family members and friends to photograph their special day'.

The poll also found that one in five couples who had used a non-professional wedding photographer in the past three years were 'disappointed with the results'.



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This panoramic by Grant Ritchie was among the more than 230,000 entries

Brits storm record-breaking Sony awards

TWENTY-two British photographers have been shortlisted at the 2016 Sony World Photography Awards – a contest that pulled in a record 230,103 entries.

Seven of the shortlisted UK photographers entered the Open category, which is open to non-professionals. They were named as: Alex Ingle, Lewis Outing, Philip Joyce, Grant Ritchie, Lesley Hall, Jack Lawson and Tino Solomon.

There is a huge range of techniques and styles from the British photographers shortlisted, but all are characterised by their originality and fresh approach to their chosen category, the organisers said in a statement.

The competition has attracted more than one million submissions since

its launch in 2007 and this year saw a 135% increase in UK entries over 2015.

World Photography Organisation CEO Scott Gray said: 'Despite the increase in the number of photographers, and the amount of imagery that required judging, this year above all others we have witnessed a wealth of powerful imagery in the traditionally strong social

documentary categories, as well as the art and conceptual work.'

Gray added: 'It is wonderful for the medium that it can offer such rich diversity.'

The shortlisted photographers will go forward to compete for a share of the \$30,000 grand prize at the 2016 Sony World Photography Awards ceremony, to be held in London on 21 April.



Jack Lawson, another amateur, was also shortlisted

Canon unveils new entry-level DSLR

CANON has revealed a new entry-level DSLR called the EOS 1300D.

Due out in April, priced \$289.99 (body only), the Canon EOS 1300D carries an 18-million-pixel, APS-C-sized imaging sensor and built-in Wi-Fi. Features include a top ISO of 12,800 and a DIGIC 4+ processor. The EOS 1300D is built to shoot



full HD video, while a 'video snapshot' mode can be used to record a series of short clips that can be stitched together to make a 'slick video sequence that shows a summary of your day'.

The camera is also compatible with NFC wireless connectivity, allowing users to transfer images from smartphones, for example, or shoot remotely.

For the latest news visit www.amateurphotographer.co.uk

Get up & go

The most interesting things to see, to do and to shoot this week. By Tom Smallwood

SURREY



Tim Rudman: Iceland – An Uneasy Calm

This is an exhibition of silver-gelatin prints of Iceland by British landscape photographer Tim Rudman. 'Iceland has a strong Middle Earth feel to it,' he explains. 'Evidence of its volcanic origins are everywhere. Geysers spurt, mud pools boil and steam billows from the ground.' All images are for sale, along with Tim's book.

23 April–3 July, thelightbox.org.uk



DERBY



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FORMAT Festival

As part of the FORMAT festival, regeneration3 brings together 50 artists from 25 different nationalities, representing some 40 international art institutions. The work on show ranges from photographic prints to multimedia installations.

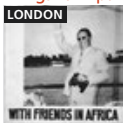
26 March–12 June, www.derbyquadrant.co.uk

Degrees°

Spanning the globe from 87° north to 67° south, this exhibition in Portstewart of Joyce Ferder Rankin's images capture the remarkable beauty of our natural world, as well as some of the struggles that animals face.

2–29 April, www.flowerfield.org

Things Fall Apart – Red Africa season



LONDON

This intriguing exhibition at the Calvert 22 Foundation draws on film, photography, propaganda and public art to present interdisciplinary reflections on African connections to the Soviet Union and related countries.

Until 3 April, www.calvert22.org

Photoworks annual

The next issue of this annual photography and visual culture journal, themed on the politics of fashion and style photography, is looking for entries. The editors are seeking new or unpublished projects from UK and international artists. Four folios will be selected for publication.

By Friday 29 April, www.photoworks.org.uk





Viewpoint Lars Rehm

The LG G5 dual camera is certainly a step in the right direction, but it doesn't seem to make full use of its potential

Dual-camera set-ups on smartphones aren't anything new. The HTC One M8, Huawei Honor 6 Plus and ZTE Axon all use a secondary camera to measure the depth of a scene. Software algorithms in the camera app then let you fake a narrow depth of field, refocus the image after capture in a 'Lytro-like' way or create 3D effects of rather dubious value. Unfortunately, image results are usually far from perfect and until now dual-camera features have not managed to be more than gimmicks, with an ever-decreasing novelty factor.

However, the good news is that LG has just upped the dual-camera game significantly with the launch of the G5 flagship smartphone at the Mobile World Congress in Barcelona, Spain. The new model comes with a secondary lens that is a full-blown camera in its own right. It offers an eight-million-pixel sensor and super-wideangle lens that, in combination with the 16-million-pixel standard camera module, allows for digital zooming across a much wider range than usual. However, LG's approach doesn't quite make the most of the new technology – when zooming in from super-wideangle, digital zoom is applied to the secondary sensor until the angle of view of the main module is reached, at which point the latter takes over. So, depending on zoom settings and which camera module is used, you end up with different image sizes and qualities.

Some prototype dual-camera modules we have seen from companies such as Corephotonics take advantage of the fact that they can capture significantly more image information than a single camera. Clever software algorithms, resulting in lower

'We might have to wait until September to see the first intelligent dual camera'

noise levels, better detail and a much better quality digital zoom, merge images from both sensors. This technology has the potential to make the lack of optical zoom on smartphones a thing of the past.

So while the G5 is certainly a step in the right direction, and with its optional camera grip an interesting option for any mobile photographer who likes extra control, it's not quite as far as we would like to see. The upcoming Huawei 9 will no doubt launch with a dual camera, but the way in which it will be used by the device's imaging software is as yet unknown. If rumours are anything to go by, we might have to wait until September to see the first intelligent dual camera, when Apple is expected to launch a dual-lens version of the iPhone 7. It would mean a large step forward for mobile imaging and, in terms of image quality, bring smartphone cameras even closer to their conventional counterparts.



Lars Rehm is a freelance photographer and writer, contributing to publications in the US, UK and Germany. In his former role as part of DPReview's testing team, he shot with countless digital cameras of all shapes and sizes, but nowadays he captures most of his images with a smartphone. Visit www.larsrehm.com or follow him on Twitter @larsrehm

Do you have something you'd like to get off your chest? Send us your thoughts in around 500 words to the address on page 18 and win a year's digital subscription to AP, worth £79.99

New Books

The latest and best books from the world of photography. By Oliver Atwell



Roman Vishniac Rediscovered

By Maya Benton, Prestel, £50, hardcover, 384 pages, ISBN 978-3-79135-395-1



WITH such a prevalence of photography books, it's always nice to discover a photographer who you may not necessarily have heard of before. Roman Vishniac is not exactly a household name, but this volume by Prestel will go some way

to change that. Vishniac was a key modernist photographer whose images dealt profoundly with Jewish life in Eastern Europe before the Holocaust. Each image speaks of displacement and a culture on the verge of breaking point, tested to its absolute limits. Looking back at these images now it's difficult not to look on them within the context of what was to follow – and that makes the images all the more harrowing and moving. This generous book offers fascinating perspectives on the work and career of Vishniac and positions him as a truly great social documentary photographer. ★★★★★

Mick Rock: The Rise of David Bowie (1972-1973)

By Barney Hoskyns and Michael Bracewell, Taschen, £49.99, hardcover, 310 pages, ISBN 978-3-83656-094-8



WITH the passing of David Bowie in January, there are a small number of books arriving on the scene that help to document the ever-changing face of an artist and musician who shed styles as quickly as he adopted them. Perhaps no other photographer was able to capture this as well as Mick

Rock, who was present during *The Rise and Fall of Ziggy Stardust* and *The Spiders from Mars*, the album that catapulted Bowie to stardom. The bond between photographer and subject is clear to see. It's rare that we get a glimpse behind the scenes, particularly with an artist so in control of his image. But here we find a thorough portrait of an individual in all his guises. This is a truly indispensable book, not just for Bowie fans but also for people interested in rock history. ★★★★★



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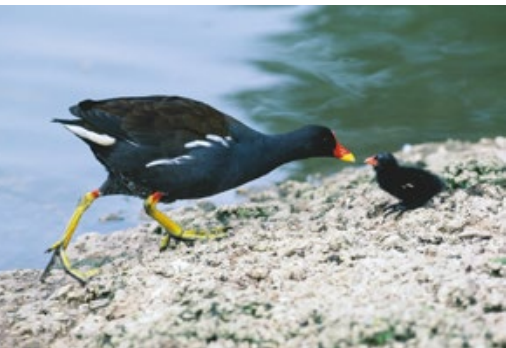
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Spring into action

The new season sees a flurry of activity outdoors, which can be over all too soon. Three nature photographers reveal how to get the very best shots this spring



Spring birds



David Tipling

One of the most widely published wildlife photographers in the world, David's pictures appear on hundreds of book and magazine covers, and have been used from wine labels to being projected in New York's Times Square; www.davidthipling.com

SPRING is nature's rush hour. There is a hurry to create new life, with birds doing plenty of interesting things whether they are singing, fighting over precious territory, frantically courting or building the most intricate nests.

Claiming a territory, finding a mate and then rearing a family requires a huge amount of effort. Photographing these various stages requires a bit of planning and plenty of effort too, but it can be hugely rewarding.

My mantra, the 'three Ps' of patience, planning and perseverance, is never more pertinent than during this extremely hectic and productive time of the year.

Nests and young

Later in spring, a return visit may offer opportunities to photograph birds on nests, or tending small young. Moorhens and coots will repeatedly feed tiny chicks, tenderly passing on tiny morsels of food. Mute swans are another great subject to follow during their breeding cycle. They give beautiful displays, often soon after dawn. Later in the breeding cycle, cygnets may be carried on a parent's back or tended to in the nest. Visit Abbotsbury Swannery in Dorset for a cygnet-fest in May and June.

Courtship

Some species perform spectacular courtship displays. The courtship dance of the great crested grebe is one of the most impressive. This species is widespread, but best photographed at locations where the birds are used to people. Check which bodies of water local to you have breeding grebes. During a recent spring I spent a considerable amount of time photographing courting grebes and was rewarded one afternoon, with a spectacular fight between rival males. A fast shutter speed and a deep depth of field were required to ensure both birds were kept in sharp focus.

Fights are common among many species of water bird in early spring. A trip to your local park lake or, even better, one of the Wildfowl & Wetland Trust Reserves such as Martin Mere near Liverpool, Gloucestershire's Slimbridge or the London Wetland Centre, will get you close encounters with fighting coots, moorhens and ducks, all vying for a female's attention or defending a territory.

Shooting as low to the water's surface as you can will help you capture a more intimate, eye-catching image. For this reason, I often dress in an old coat and overtrousers, so I have no reservations about lying on the ground for a coot's-eye view.

Early start

A lot of interesting activity occurs soon after dawn, so an early start will be rewarded. Photographing birds in song is challenging, but if you have a garden or local park, singing birds can often be approached, at least with care. Birds are creatures of habit and so the exact spots they sing from, known as song posts, are revisited frequently. Waiting until the bird returns to a favourite spot can pay dividends. If your chosen subject is timid, try concealing yourself in some way; commercially sold bag hides can be a good idea. If you do find a tame songster on a cold morning, and the sun is low, try shooting into the light – you might just get a wisp of warm breath rising from the bird's bill.





Seabirds

✓ Britain's seabird colonies are the envy of Europe. Most photographers visit them in summer when they buzz with life. However, an April visit to the Farne Islands, off the coast of Northumberland, offers pictures of eider ducks incubating eggs in their beds of down. They can be so close to a footpath that a wideangle can be used.

At RSPB reserves such as Minsmere in Suffolk and Lancashire's Leighton Moss, black-headed gulls will be busy displaying and bringing in nest material. Similarly, gannets at colonies such as Bempton Cliffs in the East Riding of Yorkshire will be plucking vegetation from the cliff tops to line their nests and, on a windy day, will hang in the wind for flight shots.

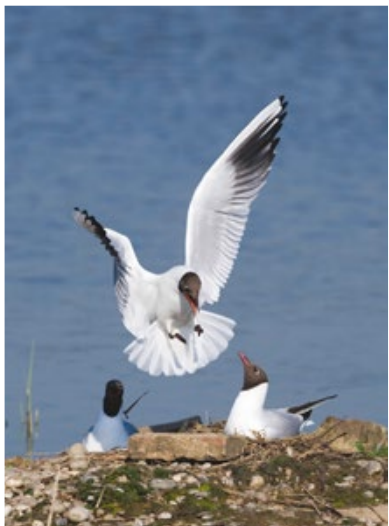
These are just a few suggestions, because there are so many opportunities. Remember, the spring rush will soon be over. With such a short window of opportunity, before you know it summer will have arrived.



The swallow returns

▲ A feature on photographing birds in spring would not be complete without mentioning a species that epitomises the coming of the season for so many – the return of the swallow. This, like the mute swan, can be a great project to undertake when photographing a bird's breeding cycle from start to finish.

On cold spring days, when insect life is lying low, swallows may congregate over areas of water, hawking for food. Although challenging, flight photographs might be possible by pre-focusing and firing a burst of shots as the bird appears in the viewfinder and, with luck, flies into focus. Swallows can nest in very public places. On some bird reserves around the country, they nest inside or even on the sides of hides, and so are very familiar with, and tolerant of, people.



Spring flowers



Philip Smith

Philip will be running workshops this year in various locations in the UK and Europe, including a two-day course in the Dordogne, France, in the summer. A full listing can be found at www.philipsmithphoto.com/workshops

SPRING flowers get the job done early. Despite the cold and wind, spring bulbs struggle through the hard ground to make sure they get ahead in the fight for survival. With little foliage cover on the trees, early spring flowers are primed to take advantage of whatever sunlight is available so they can grow and thrive. Their bright colours attract pollinating insects keen to have a nectar feast after hibernation. As photographers, we can get just as excited as the bees, as we see the wonderful colours and shapes popping up all over our gardens, parks and hedgerows.



Woods and hedgerows

There is so much to enjoy at this time of the year as the woods and hedgerows burst with life. It takes a lot of time and concentration to discern the subtle patterns that are emerging everywhere, but they can offer valuable opportunities to extend and develop both your photography and your eye for a great shot.

So enjoy the sunshine this spring – but enjoy the dark clouds as well. Great opportunities are out there, waiting for you and your keen eye.

Weather conditions

Low cloud provides good light for delicate spring flowers, but I have learned that it is no good waiting for the right weather conditions. Just as there is no bad weather (only bad clothing), for me there is no bad weather for photography, only bad timing. Low-contrast light can really make the bright colours of spring sing out. If it's very windy, I will see if I can set up a still life in a sheltered spot. Cloudy days work well, but when the weather brightens, many spring flowers open to reveal their true nature.

Sheer volume

Photographing single flowers well is both a challenge and a joy, but in spring it is often the sheer volume of colour that is so attractive. Rafts of crocuses, carpets of bluebells – choose your cliché. Translating that scene from a three-dimensional spectacular to a small, two-dimensional rectangle is not straightforward. There is a tendency for the resulting image to have much less impact than the real-life scene.



Shooting hellebores



HELLEBORES will flower from December through to April, and are among my favourite plants. The only problem with them is that their best bits are hidden, since the flower heads protect their stamens from the wind and weather by hanging down.

I like to 'go with the flow' and show a plant's character, rather than take an artificial view of it. I never clamp a plant to keep it in an unnatural position, although I will use pegs to move intruding foliage out of the way.

Some plant breeders develop varieties of hellebore with an upright habit. To me, this is all wrong. It's like giving the Mona Lisa teeth whitening so she can smile properly. That said, getting low to the ground and manoeuvring the camera to include the beautiful patterning is a challenge.



I sometimes use a pad like this. It screws into the tripod thread, giving valuable additional stability for shooting at ground level

Shoot the process

In spring we are often photographing flowers that are surrounded by bare earth. It is important to me that I can shoot and process the image in such a way that the picture is not deadened by patches of brown 'nothingness' around the subject. Here I have darkened the surrounding earth both in the initial exposure and in post-capture processing, creating contrasting tone and a visual connection between the ground and the dark markings on the petals.



Spring wildlife



Andrew Mason

A full-time, professional nature photographer, Andrew's work is widely published and has been used in books, magazines and calendars, and by corporate and government clients. Visit www.andrewmasonphotography.co.uk

Adders

Early spring is a very good time to see and photograph adders. With the sun's rays being less powerful, adders have to bask for longer and at this time of year it is much easier to see them, as vegetation is only just starting to grow. Having spent the colder months of autumn and winter underground, they start to emerge from hibernation at the end of February and the beginning of March.

They are territorial, preferring areas of open grassland, moorland and heather. They have a very defined, dark zigzag pattern on their back, which distinguishes them from grass snakes. Colours vary but males tend to be grey and females brown. Females are larger, growing up to 75cm, with males reaching up to 60cm. Adders are poisonous and their bite is painful, but it is only very rarely fatal.

With a careful and slow approach it is possible to get relatively close to an adder when it is basking. Adders should always be photographed in situ. This may mean your images lack that perfect foreground and background, but the welfare of the snake is paramount.

When photographing adders, I prefer to use a close-focusing telephoto lens (such as the Nikon 200-400mm) with a good reproduction ratio. This allows a reasonable working distance and allows frame-filling images to be created.

Remember, adders are classified as a priority species and are protected under law.



Ladybirds

Like many insects, ladybirds become dormant during the winter months. They can be found hibernating in large groups in vegetation and crevices, such as those found in tree bark or buildings. From March, they start to emerge from hibernation to mate. Ladybirds are widespread throughout the UK and can be found where there is vegetation and the aphids they feed on.

With their bright red or orange shells and black spots, ladybirds make a great subject to photograph. On new leaves, unfolding ferns and flowers, they make for images with impact.

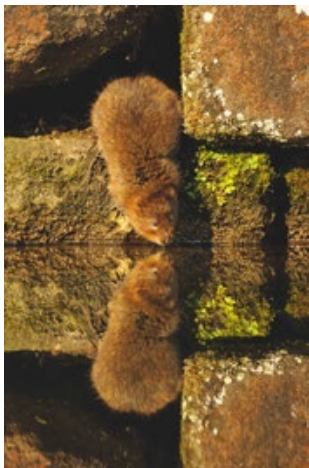
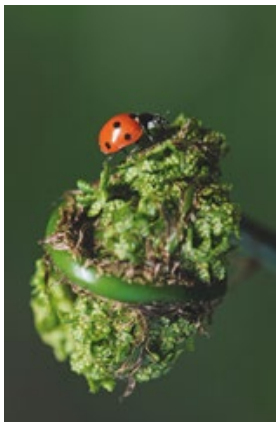
As well as photographing ladybirds on vegetation, interesting images can be made of them on man-made structures. I have photographed them on barbed wire and on gravestones in a churchyard near my home.



Mornings can be a good time to photograph ladybirds. A lens with a reproduction ratio of at least 1:1 (such as a 105mm macro lens) is ideal for making true macro images of ladybirds. It is also possible to achieve this level of magnification by using close-focusing filters, extension tubes or adapters that allow lenses to be mounted in reverse.

As with all macro photography, the amount of available light can cause issues when photographing ladybirds. Dedicated macro flash units are one option where light levels are low. Another is an off-camera flash with a diffuser attached to give a softer, more even light.

In bright conditions, flash can be used to overpower the available harsh natural light. Alternatively, a diffuser can be used to reduce contrast and to soften the natural light.



WATER VOLES © SHUTTERSTOCK

Water voles

Immortalised as Ratty in Kenneth Grahame's *The Wind in the Willows*, the once common water vole is, sadly, the UK's fastest declining mammal. A combination of habitat loss and predation, following the misguided release of the captive American mink, has dealt a devastating blow to our native water vole population. Hopefully, the hard work that is being done across the country by numerous wildlife organisations will reverse the decline of this charismatic mammal.

Water voles are the largest of the voles found in the UK. While their numbers have fallen, they are nonetheless widespread. They live in burrows in and around slow-flowing streams, rivers and ditches, reed beds and marshes, ponds and lakes, and wet moorland. They have favourite areas where they will feed on vegetation, often making 'lawns' of grass cut at a tell-tale angle of 45°. Another field sign to look out for are their latrines of lozenge-shaped droppings that can be found on rocks and stones.

While water vole populations are not at their highest in early spring, it is one of the best times to photograph them since the vegetation in their preferred habitats is at its least dense. Once you have located an area where water voles are present, you will have to spend time observing the area to build up a working knowledge of the resident water voles' behaviour and the places it may be possible to photograph them in.

I prefer to photograph water voles from their eye level. Not only does this give a more intimate perspective, but when using a long telephoto lens it helps to blur the background, which makes them stand out. Photographing from water level can be challenging, but it works well when the water voles are swimming in, or eating in and around the water. Photographing through vegetation can also produce engaging images. As a result of their decline, water voles are protected by law, so when photographing them, take care to avoid disturbing them at their places of shelter.



'JETTY'

Jetty was photographed by Mark Bauer using the Lee Filter's Little Stopper and 0.6 ND Hard Grad filter.

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LETTER OF THE WEEK

Credit where it's due

The maxim 'a picture is worth a thousand words' is obviously a thing of the past. Take, for instance, the wonderful photograph used in many national newspapers recently of the *Flying Scotsman* on its inaugural run from London's King's Cross to York, in celebration of the locomotive's ten-year £4.2million refit.

There were thousands of photographers, both professionals and amateurs, on the 200-mile journey, including myself who was at Colton, near York. Yet, in my opinion, only one image captured the true majesty of the locomotive on its historic journey, which was a perfect photograph in every way. Given the column inches devoted to the photograph in the media, you might have thought the photographer would have been acclaimed for his skill. Wrong. I had to read his name using a magnifying glass as it was barely readable. His name is STEPHEN DANIELS and I type it in capitals so that your photography-loving readers do not have to resort to a magnifier as I did.

For all of us who tried to capture it with our own cameras, it was a really difficult



This image of the *Flying Scotsman* at King's Cross was taken by AP's Michael Topham

challenge, with no rehearsals and perhaps a one-second window to get the shot.

Why is there such little regard and respect for photography and photographers in our newspapers these days? The maxim must have changed to 'a picture is worth a word'.
Dr Keith Massey, North Yorkshire

We always credit a photograph whenever we possibly can. Are our credits big enough, or should we change them? Let us know – Richard Sibley, deputy editor

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Latest Pentax

Having used a wonderful Pentax MX SLR from 1981-2008, then a K10D DSLR, and most recently a K-5 DSLR, I have been looking forward to the launch of the full-frame K-1 from Ricoh Pentax. Naively, I was hoping that Pentax would have watched the market carefully, and realised that it can no longer compete with Canon and Nikon in the full-frame DSLR market. The real competition must be the Sony full-frame camera bodies – compared to the MX body, even the K-5 appears massive, and the K-1 is larger and much heavier than the K-5.

Using such technology,

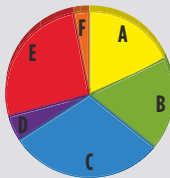
Pentax could have made the camera body I have been waiting for – close to the size and perfect design of the MX film body, possibly with the automated exposure and focus that it appears that photographers cannot survive without today.

I would also suggest that Ricoh Pentax looks at recent Fujifilm camera bodies, and puts a shutter-speed dial on the top of the body and an aperture adjustment ring around the lens mount so that when using modern lenses without an aperture ring, at least the adjustment control will be close to the right place. When using the K-5 body in manual mode, it is possible to assign the aperture control to the front dial on the body and

the shutter speed to the rear dial, which is a near as I can get to the functionality of the MX on a body that will fit my various old Pentax-fit lenses.

Perhaps it is time to admit that the design of camera bodies has not improved much in the past 30 years.
Chester Willey, via email

Look at a DSLR and you will see the marking for the film/focal plane sits at the back of the camera body, with just the camera door behind it. Look at the small CSCs and you will see that the focal-plane marker, where the sensor sits, is a lot further forward. This is because, without the mirror box, the lenses can sit far closer to the sensor.



In AP 5 March we asked...

Do you consider removing an object from an image 'cheating'?

You answered

A Yes – if it was in the scene then removing it is cheating	18%
B Yes – but only in certain situations, such as journalism	18%
C No – but only if it is insignificant, such as litter	30%
D No – I will change major parts, such as swapping the sky	5%
E No – but it depends on the context of the scene and final image	26%
F Other	3%

What you said

'I largely take architectural photographs. I Photoshop out objects because they are annoyances, such as distracting cars, people or signs on exteriors'

'Generally, any interference with a photograph is a distortion of what was captured at the time, so it could be accurately construed as "cheating"'

'Since I don't do documentary or natural history seriously, I have no issue with moving/removing stuff'

'Journalists must show "reality" and in competitions wildlife photographers are usually expected to demonstrate their fieldcraft and camera skills. But beyond this, photography is about creating striking images, where no editing techniques are "cheating"'

This week we ask...

Do you think drones should be banned?

Vote online www.amateurphotographer.co.uk



Tweet of the week

Andrea Heribanova @andrea_h

We've seen this scene plenty of times, but never quite like this. Andrea Heribanova has captured a shot of London's Millennium Bridge and St Paul's Cathedral in some amazing light



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➤ This means the sensor can sit further forward away from the rear of the camera, leaving plenty of room for the buttons, dials and LCD screen to sit.

Take a DSLR and add all those buttons, dials and a rear LCD screen and you will see that takes up far more space than a simple metal door and some light seals, and this is why DSLRs are much larger than their CSC counterparts. Many people were shocked at the size of the Nikon Df as they expected something smaller, more akin to the Nikon FM2. Pentax tried to make a CSC, of sorts, with a K mount, in the form of the K-01. Essentially, it was a DSLR without a mirror box or optical viewfinder, so it wasn't as tall, but was just as wide and deep.

Pentax DSLRs also gain extra bulk due to the in-body image-stabilisation mechanism, but this brings significant benefits compared to Canon and Nikon competitors, so it would be foolhardy to remove it.

If you want to replicate that minimalist DSLR design, then our personal favourite is the Fujifilm X-T1 – Richard Sibley, deputy editor

What a revelation

I read both Richard Sibley's editorial (AP 30 January) and Adrian of Gloucestershire's letter (AP 5 March) about the long-awaited Nikon D500 with interest, and can only echo their thoughts.

I have been a Nikon SLR/DSLR photographer since 1991, and since 2007 have used the D300. Had a D400 been released, had the D500 come along 18 months earlier or if Nikon hadn't repeatedly claimed that the D7000 series was the successor to the D300 for which there was to be no direct replacement, I am sure I would still be a Nikon user. But I bought an Olympus OM-D E-M10 in 2014, thinking it would be a nice travel camera, but by no means a replacement for my DSLR.

I had no intention of leaving Nikon. I enjoy motorsport photography and conventional wisdom says that mirrorless cameras aren't up to the job. However, the Olympus OM-D E-M10 was a revelation and even managed decent results at the racetrack. As a result, I bought an OM-D E-M1 last year, and have sold my Nikon digital equipment. The E-M1's AF is considerably more advanced compared with the E-M10, is well up to motorsport (see image below) and there is no discernible EVF lag. Perhaps if I had used Nikon's FX system I would not have been tempted to switch, but in comparison with Nikon's DX system I am more than happy with the switch to Micro Four Thirds – and the weight saving is a bonus!

Stephen Morgan, York



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Spring light

As the new season begins, it's the perfect time to experiment with portrait, landscape and street photography. Two experts present their tips and techniques for getting the most from spring light

Portraits

Michael Freeman looks at how spring light can affect portraits, both candid and posed

Given that it's perfectly possible in Britain to experience the weather patterns of two seasons in the same day, the exact moment that spring arrives might be a matter for debate. Generally, however, we start enjoying more sunshine, and the midday sun gradually gets higher.

If deprived of it, we crave sunshine and there's a widespread feeling that it's basically good for photography, however much we may justify the restraint and subtlety of soft grey light (otherwise known as 'boring overcast'). Nevertheless, whatever it does to landscapes, and however much we like bathing our faces in warm sunshine, it can be a little problematic for portraits.

There's an inconsistency here. Why would crisp sunlight, that beautifully details trees, hedgerows and the contours of hills, not work just as well with faces? The problem

is flattery. Implicit in almost everyone's idea of portraiture is that it ought to make the person being photographed look good, or at least as good as possible. The fight against wrinkles and creases isn't confined to just the cosmetics industry. Most of us want our portraits to look flattering, and skin just doesn't look smooth under raking light. Soft lighting on the face allows the really important things to shine; things such as the expression from the eyes and mouth. Get these right and you'll always have a portrait that will please – and if you're shooting with a cooperative subject, rather than candidly in the street, pleasing tends to be important. When it comes to lighting, that means keeping hard shadows off the face.

Ultimately, it is a matter of taste, and you should always be wary of prescriptions, even these here, which work for me but may not for you. What I'm promoting here are my preferences and they're generally variations on a common theme, which is to shoot mainly when the sun is quite low, keeping it behind or slightly to one side so that it adds sparkle and contrast to a shot that is lit mainly by shadow and reflected light. Within this basic prescription, however, there are nuances, and each needs a particular approach.



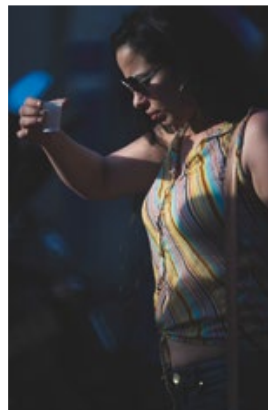
Three-quarter backlighting

⬆ The rather clumsily named three-quarter backlighting (I can't think of a better descriptive term) gets sunlight onto the face, but only on a small area – about a quarter or a third. This usually looks good when the portrait is active, with someone actually doing something such as talking, because for it to work, the face has to be looking off-camera, as in the shot above. One of its better features as a lighting technique is that it gets across the impression of being bathed in sunlight, and if you keep the exposure to just below clipping of the highlights, it won't go out of range.



Edge lighting

⬆ Edge lighting will help you define outlines and lift the hair. Wait until the sun gets low – around 10° above the horizon – and you have the possibility of low-intensity edge lighting, as in the above picture of a young roller-skating team. The key to this kind of shot is having hair catch the warm sunlight. The sun is a lot less intense now, so it won't overexpose and will keep the colour. As with the backlighting method [see picture, top], expose for the shadow areas, but evaluate this during raw processing. There is rarely one perceived best level of brightness.



Hard sunlight

⬆ This is a more personal style than the others mentioned here, and it has less to do with the portrait looking conventionally attractive than making a stronger graphic impact with good contrast, so for me it's more a choice in street photography. It relies on side lighting, more or less at right angles to the sun, low sun and – something that is absolutely key – a shadowed background. Given these conditions, it tends to work best when the person is facing into the sun, making it a profile shot. During processing, I recommend resisting the temptation to open up shadows. Keep them dark and you'll have an image with stronger lit shapes.

Move to the shade and reflect

⬆ This is the catch-all, fail-proof technique. Move into the shade, but only just into the shade, so there's a nearby blast of sunlight you can catch with a reflector and bounce onto the face. Experiment with the angle of the reflected light, as it can work from many directions: play with frontal, from below or from three-quarters back. It helps to have a friend or assistant to handle the reflection while you concentrate on shooting and expression.

Expose for the shadow

⬆ Try to keep the sun behind and expose for the shadow. Modern high-range sensors, smart metering and raw processing have removed most of the technical problems from this approach, and it remains only to shoot into the sun with your subject's hair lit up. Exposure is critical. Yes, the high dynamic range we've all become used to in recent sensors will give you the latitude to recover highlights and open up shadows, but remember that clipping means lost highlights. Make sure you're familiar with whatever metering method you favour. Even smart metering may need exposure compensation. I use smart metering and the compensation dial to open up by around 2/3 stop in an example such as this [right].





Landscapes

Michael Freeman examines how spring light can provide a delightful perspective on your landscape photography

With the arrival of spring and the start of more sunshine hours we can expect, in theory at least, to get back to our old friend the golden hour. It put in the occasional appearance over winter, but from now on there's a better chance of being able to plan some good-weather shooting. The main beneficiary is, as usual, the landscape.

This is a genre of photography that really does respond to planning, because while weather is the variable, potential viewpoints don't change; they just need to be discovered and noted. Even in boring light, any time I spend checking out viewpoints and framings that will work in low sunlight is never wasted. I log them and wait for the right weather in which I think they'll deliver.



The golden hour is in danger of becoming a cliché of landscape photography, which is a pity because it's an exceptionally useful and attractive time for shooting. It's not all about the warm glow by any means (I'll come to that in a moment), but rather more to do with contrast and relief. Landscapes are large scale and, when taken wide, have fewer elements that stand tall than many people might think.

Most British landscapes tend to be rolling or level, rather than sheer, and so reveal little texture under overcast skies or a midday sun. Raking light, which is what you get when the light source is low, brings this out in the same way for small-scale surfaces such as brick and stone.

Moreover, you have a choice of different lighting effects that I call three-point lighting, because you

Top: Not all spring light has to be strong. The delicate haze of an early morning is also a condition that can be exploited

Above: High-contrast light will give you sharp and clear images, and means you can consider the inclusion of silhouettes

have a potential full circle of lighting. Simply put, there is axial (sun behind the camera), side lighting from either left or right, and into the sun. Even if you start with just one of them, the others may also be available, depending on your location, so it's worth looking around. All these factors coincide with the colour that gives the golden hour its name.

The colour comes from particles scattering in the atmosphere and bouncing the shorter blue wavelengths away. At the same time, the sun's light has to travel through greater and denser atmosphere as it grazes the land.

Remember, too, that it's not only the golden hour but also spring, and that engenders special seasonal qualities. Leaves are young and bright green, tending slightly towards yellowish. Above all,

there's the year's first crop of flowers: look out for bluebells, daffodils, cherry blossom and so on.

Into the sun

Shooting into the sun is one of the least predictable lighting situations because when the sun is low, the state of the atmosphere is the ruling factor. Sharp and clear, as in the image of the horse in the paddock [below left], gives such high contrast that you might have to consider a silhouette.

When there's a soft haze, the situation is very different, as in this example from China [left]. Here, it's the beginning of the day, facing into the late sunrise with a misty wash over the landscape. The all-important soft atmosphere does several things. First, it suffuses the scene in a golden glow, because we're facing into it. Second, it gives a gentle version of the well-known ability of real fog to separate a scene into distinct planes. Third, and very valuable, the contrast is low enough to be able to hold landscape and sun in a single frame without clipping.

HDR on the fly

No, this isn't about neurotic over-processing (just my opinion, obviously, but strongly held). HDR is a genuinely practical solution to shooting into the sun while retaining full, bright colours in what would otherwise be silhouettes. The cherry blossom in this Cumbrian churchyard [above right] were a classic spring scene, and a predictable problem for a shot in which I wanted to feature the sun shining through. The backlit blossom needed a very full exposure to record its colour, but the small-aperture sunstar needed several



stops less if it were to keep its colour, too. That's what HDR is for. Handheld? No problem. Just set the shutter to a fast burst (I used a Nikon D4) and a 9-stop range of bracketing. Image alignment and anti-ghosting in Photoshop's Merge to HDR Pro worked seamlessly and fast. The file saved as a 32-bit floating point TIFF and opened in ACR, just like any raw file, with the

Here we see Michael's example of how HDR can be used effectively

difference being an exceptional dynamic range. Using the normal ACR sliders, and avoiding Clarity like the plague, with some local radial filters, the result keeps all the normal photographic qualities.

Your choice of colour temperature

The golden hour used to mean what it said – images suffused in a golden hue that's conventionally likeable. But all the time? Frankly, like any good thing, it can become a little tedious. Nor is it necessary. Let me argue the case for a cleaner, more neutral colour temperature.

Our vision adapts to colour casts and we 'see' landscapes that are lit by a low sun as more normal (for which read neutral) than colour film or a digital daylight setting. When shooting raw, the colour-balance settings are kept separate from the image file, so you can choose whatever you like when you process.

I like to have such a choice. I shoot auto white balance simply because you have to choose something, and increasingly these days I leave it at that, or tweak towards warmth. There's no universal correct white balance; just what looks right to you.



Crosslighting

MAXIMUM landscape texture comes from some form of side lighting. It gives the highest visible contrast between lit areas and long shadows. As a rule of thumb, a sun elevation of between 10° and 20° delivers this well, so long as the air is clear. Look for this at the tail end of one of those cold showery fronts that pass through in the spring. Even so, don't rely on crisp light to last for a moment longer than you can see it, because when it goes, or a cloud moves in front, it disappears quickly. This shot is from spring in the high savannah surrounding Bogotá, Colombia, where the air is clearer because of the altitude of 2,600m.



Michael Freeman is a British author, photographer and journalist. He has written more than 40 books on photography, focusing mainly on technique and practice. To learn more, visit www.michaelfreemanphoto.com

Street

The London-based urban photographer Rupert Vandervell reveals how spring light can lead to images of beautiful contrasts and graphic lines

After months of short winter days in which the low sun struggled to break through and the streets seemed to be forever in gloom, the early spring weather is a joy to behold. It's my favourite time of year. As a photographer whose main hunting ground is deep within the metropolis, I can once again look forward to long days working with beautiful light that creates breathtaking scenes.

Shadows are full, and there is a good tonal range between them and the brilliant highlights. For those working in black & white, the vitality of the city is the perfect place to show the greyscale palette.

The weeks between late April and early June are the best. Around mid-May the light has a very special quality. In the mornings, until about 11.30am, it is clean and clear, and everything feels alive. The trees have yet to become lush with leaves. They let light through, creating intricate patterns on the ground. With a spring rain shower, the streets put on a dazzling show.

The light

The afternoon light is more subtle, and has a real warmth and ambience to it. This is a good time



to think more abstractly about your pictures. As the sun sinks, it catches people as they move around the streets, creating dramatic points of light and silhouettes. Backlighting is strong and long, and soft shadows are dominant. As the sun peeks through the architecture, its rays fall in patches creating a combination of shapes, forms and graphic activity, providing plenty of source material for your pictures.

I love images made up like this, especially when they strike a slightly discordant note. Fragments of objects and people are often more visually appealing than the whole, perhaps adding a sense of drama or intrigue. Don't be afraid to experiment and to try new things. Move around an area to get a feel for how the elements best balance

Above: By exposing for the highlights, Rupert is able to capture strong shafts of light and deep, dark shadow

Below left: Using Rupert's methods, people become a graphic element within the overall scene

Below: Rather than focusing just on people, Rupert also finds the time to capture the 'street furniture' as well

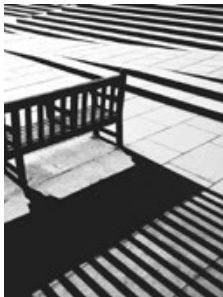
themselves. What interesting zones are being created? Shadow areas will often be your foundations, but it's important to place your lighter areas carefully so that they play a proper supporting role.

It's also a great time of year for reflections. There is so much glass and steel in our cities providing a wealth of opportunities with light. Pedestrians merging in shop windows, buildings mirrored in car roofs and light patterns imprinted on roads are some of the things to look for, and further examples of how we can use spring's vibrant light to our advantage.

Angles and highlights

I tend to expose for the highlights and often let the shadows fall dark, as I want to use them as graphically as possible. I use a small aperture for maximum depth of field and I'll underexpose a little to create a more subdued mood in the late-afternoon sun. I'm particularly fond of geometric shapes created by shadows. Their tight angles and long lines can have an almost 'cubist' feel to them. For me, these are the building blocks and during spring's sunny days they have a delicate, feathery edge which softens them just enough.

They'll generally need to be balanced by a complementary lighter area. Depending on your scene, it can be anything from pure sunlight on a surface to the narrowest of white lines. Indeed, a thin line of light can be a winning



Unusual viewpoints can lend a scene a strangely abstract quality, particularly when combined with strong graphic elements and powerful light



feature. Whether it leads the eye into the frame or cuts through a heavily shadowed area, it can make the image really work.

People

As the warmer weather arrives, people tend to shed their coats for lighter clothing. Their prominence on the street can be used to great effect. Shapes and colours can be used creatively to bring other areas of your scene to life. I have used many a white-clad figure to add scale or drama to an image.

It's quite important how you feature people in your frame, and their position in the scene can have different effects. Catching them in the right light is the trick. I usually

want to be quite precise about this, because for me they aren't just passing through, they are playing a key role and it is up to you to try to anticipate their movements. I also like how random figures move through shadows, occasionally catching a beam of light to create a kind of 'mosaic' effect. Whether in full light or partly exposed, it's all about how they fit in the composition. The juxtaposition between the urban landscape and the human form is fascinating.

Street furniture

While the human element or the architecture may be the main focus of your pictures, the use of street furniture can also work as an



Born and based in London, Rupert Vandervell's photographic style is representative of his personality. He's always been obsessed with clean lines, and his work explores how we interact with our environment. Visit www.rupertvandervell.co.uk

interesting graphic element. It can be anything from benches, billboards and road markings to kerb sides or even drain covers. They can all add a focal point and help to balance a scene. I once became fascinated by the way a handrail was creating a shadow on the pavement, and how it wrapped itself over a step and lined up with the cracks in the pavement. When a woman in heels walked by, it completed the scene.

Another time, strong lines of shadow were cast as the sun hit the railings of a bridge. Below, a man stood looking at the sky, perfectly framed between them. These are some of the moments I'll look out for in the bright spring light.



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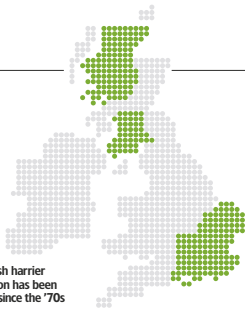


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WILDLIFE WATCH

Marsh harriers

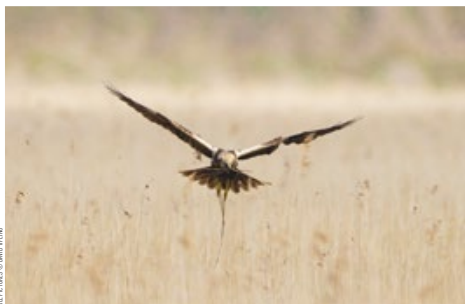
These shy birds of prey are certainly a challenge to photograph, as **David Tipling** explains



The marsh harrier population has been growing since the '70s



Slightly larger than a buzzard, marsh harriers are very active in early spring



ALL PICTURES © DAVID TIPLING

Marsh harriers fly low over reed beds, creating superb photographic opportunities



KIT LIST

▲ Beanbag

A beanbag may be useful for supporting a long lens when shooting from reserve hides.



▲ Teleconverter

A long lens is vital to success – at least 500mm is desirable. However, a teleconverter will help extend that focal length even further.

About the marsh harrier

With their wings forming a shallow 'V' shape, the marsh harrier is the largest of the harrier family of birds. Females are larger than males and have a distinctive cream-coloured head.

- **Location** Found in the south-east and east England, although some can be found in the north-west and south-west Scotland.
- **Size** Slightly larger than a buzzard at 47-57cm in length with a wingspan of 115-140cm.
- **Nest** The birds can be found on the ground in large reed beds, but they also nest in crops.
- **Diet** Typically small birds, amphibians and mammals.
- **Population** The UK sees some 320-450 breeding pairs annually. There has been a dramatic increase since the existence of a single British breeding pair in the 1970s.

AS A fledgling birder in the late 1970s, I remember lusting over the only British breeding pair of marsh harriers. Left alone and fully protected, their comeback has been a great success story, with a growing population estimated to be currently around 450 pairs.

Habitat

Marsh harrier strongholds include East Anglia, Lincolnshire and the south-east of England. They are spreading, and now breed in low numbers in other regions of the country. Nature reserves with large areas of reeds tend to be the best sites to visit to attempt to photograph marsh harriers. This is one of Britain's more challenging species! Be aware that this is a sensitive breeding bird, and is protected under the Wildlife and Countryside Act 1981. Any disturbance at or near a nest is strictly forbidden.

Best time to shoot

Early spring and early summer are two key times for photographing these birds. Marsh harrier pairs are very active in the early spring. Males dance high in the sky, while females collect sticks and reeds to build their nests. By early summer, chicks have arrived and are being fed. Males bring food, making a 'food pass' to a female that flies up from the nest and catches the prey in mid-air – a challenging image to capture.



David Tipling

David is one of the most widely published wildlife photographers. His pictures have appeared on hundreds of book and magazine covers, and have been used in other ways, from wine labels to being projected in New York's Times Square.

www.davidthipling.com

Shooting advice

Early or late?

The birds are active throughout the day, but it's worth noting that on warm, sunny days reed beds generate a great deal of heat, which then rises to form a heat haze. While it may be hard to see with the human eye, this haze will degrade image quality and make your images look soft. If shooting over reeds, then early mornings or evenings, when it's cooler, tend to be best.

Getting close

As already mentioned, this shy species is protected by law. However, the large reed beds in which they breed are primarily within nature reserves, with excellent hides that offer you the best opportunity of getting close.

All the images in this article were taken on reserves managed by the RSPB or The Wildlife Trusts in eastern England. You need patience and perseverance, so repeated visits and time spent waiting will be rewarded.

Opportunities on reserves vary annually depending on whether birds are nesting close to hides or regularly hunting in certain areas, so a bit of research may be required. Locations that are worth visiting for marsh harrier photography include RSPB Minsmere and RSPB Lakenheath Fen, both in Suffolk; and RSPB Strumpshaw Fen in Norfolk. These sites hold enough breeding birds to provide good shooting opportunities and are excellent sites to photograph other species.

Marsh harriers' habitat and their custom of flying low over reeds lends itself to images that show the wider view, placing the bird within its environment. So even if they do not come close, it should be possible to get some good results.



All these images were taken by David at RSPB and Wildlife Trust reserves in the east of England



As right as rain

Precipitation is a fact of life in the UK, be it heavy downpours or light spring showers. Three creative photographers explain why you should always get your camera out when the heavens open

When the heavens open, don't hide your camera away – there are still plenty of things to shoot

About the photographers



Tony Worobiec

Tony is a well-known landscape, architectural and travel photographer, and the author of 15 books. He also runs regular courses and workshops. www.tonyworobiec.com



Jim Richardson

Photojournalist and teacher Jim is known for his explorations of small-town life. His work appears frequently in *National Geographic*. www.jimrichardsonphotography.com



Alex Saberi

Another *National Geographic* photographer, Alex turned his hobby into a profession with images now regularly appearing in the national press. www.alexsaberi.com

If you curse your luck when it starts to rain and immediately pack away your gear, you need to reset your mental barometer. 'There's no such thing as bad weather, merely new challenges, and rain is one of them,' notes landscape and travel photographer Tony Worobiec. Tony teaches courses in 'good photography', whatever the climatic conditions. He adds: 'It takes commitment to get out there and take photographs when it's pouring down, but if you do you will be rewarded with some wonderful opportunities.'

Most photographers in the UK will have seen enough rain for a lifetime, and take it for granted. But with a bit of creativity and lateral thinking, shooting in the rain can be a great chance to take very distinctive shots.

Over the next few pages, three experienced and creative rain photographers talk about their different techniques and approaches for ensuring interesting images whenever those spring showers start.

Not all rain is the same

Just like grey skies, rain comes in many varieties, each of which presents unique challenges for the photographer. Drizzle is the lightest type and relatively easy to work in. The droplets of water are smaller than raindrops and it can often be confused with mist. The ground will appear wet, although in light drizzle the water can evaporate quite quickly.

Thunderstorms are obviously much more violent, and while they can be tricky to work in, there can be some great opportunities for original images as a lot of your contemporaries will be sheltering indoors! Storms that involve thunder and lightning are more common in late spring, particularly during the afternoon and evening,

'Surprisingly, steady rain is possibly the easiest rain condition to work under'

so check the weather forecast. Rain with wind is possibly the most difficult weather condition to work in, particularly if the direction of the wind fluctuates. It is possible to work with your back to the wind, but you will find it does have a habit of changing direction.

Surprisingly, steady rain is possibly the easiest rain condition to work under, and one which offers the best possible results. The secret is to look to the ground, as the reflections and enhanced colour saturation open up all sorts of creative possibilities. Free of wind, you should be able to work quite comfortably – providing you take necessary waterproofing precautions.

Reflected glory

While a sunny spring day will inspire even the most jaded photographer, steady rain falling from a flat grey sky is much more of a challenge, but there are still plenty of options. Take shooting reflections, for example. 'Tarmac surfaces, in particular, become increasingly more contrasty and quite reflective,' notes Tony. 'If you can, find a slightly raised vantage point; moving traffic can add further interest. Pedestrianised areas also offer rich pickings as the passing figures are so concerned about remaining dry, they are unlikely to notice you photographing them. The reflections they create can be especially appealing.'

National Geographic photographer Alex Saberi has captured some wonderful images of reflections created by the London rain, often including people to provide extra interest. 'I'd seen people try reflections a few times before, but I'd never liked the grey and dull outcomes, and it seemed to me that was mainly down to the time of day they were shooting,' says Alex. 'So even though it was more difficult to shoot in London at dusk, I much preferred the illuminated landmarks and, of course, the reflected colours of the streetlights and shop windows.'

When it comes to camera technique for reflections, focusing can be a particular headache. 'I experiment with where's best to focus on,' adds Alex. 'At times, this can be a landmark on which I prefocus, then recompose the shot into the reflection. At other times, the actual pavement with the chinks of light can work out best. In this case, I will focus on the part of the pavement I want, set the lens into manual and then wait for a subject to walk by.'

If you are also going to include people in your rainy-day shots, it's a good idea to go for medium-to-high ISO settings in order to get fast enough shutter speeds for moving subjects. Alex adds:



WET-WEATHER WONDERLANDS

Here are some examples of how Tony Worobiec made the most of rainy



Parked Car and Wet Tarmac

'I shot this at dawn and was fascinated by the rich colours of the nearby neon reflected in the wet Tarmac,' says Tony. 'While it is easy to assume I was exposed to the elements, I was sheltering underneath the canopy of my motel room.'



Spanish Café at Night

'It's quite amazing how rain, particularly when photographed at night, can transform an otherwise prosaic location into something more special,' adds Tony. 'Seen earlier in the day, I barely gave this café a second glance.'



For shots like this, Alex Saberi likes to experiment with focusing, often manual focusing



Don't let wet weather deter you – make your own rain cover to keep your kit dry

On a budget

IF YOU resent spending money on a rain cover you might only use a few times a year, it's easy enough to make your own to cope with spring showers. Take a clear plastic bag, then position the bag over your camera and lens so the centre of the bag sits on top of the end of the lens (making sure your camera is completely covered by the bag).

Secure the bag over your lens with elastic bands, then cut out a hole for the lens. Remove your eyepiece and make another hole before replacing it, or stick the bag around the eyepiece with tape if you can't remove the eyepiece.

Next, attach your lens hood, ensuring the bag sits between the hood and lens body. Check the lens is sealed properly, adding an elastic band on the lens barrel near the hood for extra peace of mind.

and wet weather to get some stand-out shots



The Blue Swallow Motel

You don't necessarily need a torrential downpour to get an interesting shoot in the rain, says Tony. In this example, there was just a light drizzle, but it was sufficient to offer a reflective surface for the gaudy neon lighting.



Waterfall

'Waterfalls make excellent subjects to photograph when it is raining, says Tony. They're best shot using a slow shutter speed in order to capture the silky effect of flowing water; this is most successful in overcast conditions.'



Swanage Pier, Dorset

Tony explains how jetties and piers can make great subjects to shoot in the rain. 'By ensuring that my ISO rating and aperture were preset, I was able to take my camera out of the bag just at the last moment, thus minimising exposure to the rain,' he says.

‘Although for me, “fast” has meant as slow as 1/10sec! I’ve found that general evaluative metering works best, but I would suggest experimenting. That’s the fun part with this type of abstract photography in the rain. You can get some cool unexpected results just by trying out different settings.’

‘Maybe try adding a different element by flashing the passer-by with your flashgun, too, while you shoot the resultant reflection.’

Flash flood

Puddles and reflections are one thing, but heavier rain can be hard to capture. Even when it’s raining cats and dogs, you can end up with an image that looks grey and flat. ‘In some situations, a little pop of flash can really help raindrops to show up,’ notes travel photographer and *National Geographic* contributing editor Jim Richardson. ‘Try turning the flash power way down, like -3 stops, and it will add just a little pop to the raindrops.’

As Jim notes, however, this can result in the nearest drops being lit up the most. ‘So try to get the flash off-camera and over to the side, then you have a beam of light through the curtain of rain falling in front of you,’ he adds. ‘If it’s dark enough and you have a torch, you can do the same thing – especially with long exposures. Try moving the torch beam in falling raindrops and you get a nice streaking effect.’

To make the most of ambient light, particularly when shooting landscapes, Jim recommends you try to position yourself where light is coming through from the ‘backside’ of the rain. ‘Rain is much more visible when it is backlit, so try to shoot towards the light source,’ he adds. ‘The more directly you shoot into the light, the better you will see the raindrops. Adjust the angle if necessary to avoid overexposure from the light source.’

‘Say it’s raining where you are, but there is a break in the clouds over in the distance. You will get a beam of light coming from behind the rain.’

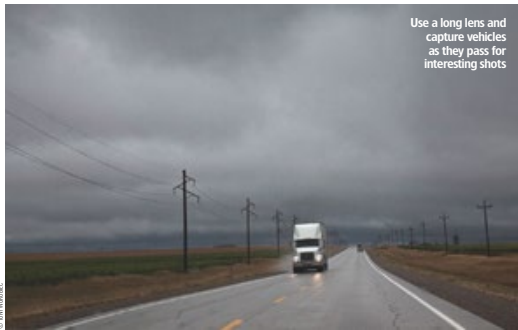
‘One of my most successful rain images was taken in Kansas in the USA, of a rain shower passing through a place in about two minutes (see top right). The sunlight coming through the backside of the rain gave the scene an etched-steel look, which

When shooting landscapes, try to position yourself shooting into the light

© JIM RICHARDSON



Use a long lens and capture vehicles as they pass for interesting shots



© TIM MOORE

KIT LIST

Storm jacket

There are lots of rain covers for your gear, but Jim Richardson swears by the Storm Jacket from Vortex Media (www.warmcards.com). ‘This has an adjustable elastic band to go around the front of the lens, and another at the back, so you can access the camera,’ he says.



Mudder rain cover

Alex Saberi favours the Mudder rain cover, available from Amazon and other retailers. It has a full-length dual zipper that provides bottom closure when your digital SLR is held by hand or mounted on a tripod.





Top tips to toy with

Here are some ideas and techniques to try when we have that inevitable downpour this spring

1 After the rain

As many landscape photographers will testify, a great time to shoot is immediately after the rain stops. Rain enhances colours, and as the sun emerges you'll see some great opportunities, possibly even a rainbow.

2 Watch for theatrical moments

The moment a rainstorm passes, the sky will start to clear from the direction the storm has come from. The relative lighting between the area still under the storm and the area bathed in sunlight is quite extreme, providing some great opportunities. You may need to use a graduated filter if you get an overexposed foreground or underexposed sky.

3 Capture dramatic cloud formations.

The clouds you see immediately after rain can look very dramatic. Big cumulonimbus clouds are especially appealing if taken in early morning or late afternoon light,

as the warming colours of the sun are much more apparent.

4 Look out for patches of blue sky

Shortly after a storm has passed, small areas of blue sky may emerge, which work well with the broken cloud. Clouds tinged with orange from the sun look great against the blue of the sky, as they are complementary colours

5 Perfect your puddles

Often the air is quite still after a period of rain, so puddles create natural mirrors. Try getting down as low as you can for interesting angles. Also, don't forget that you can get some very creative abstract or impressionist effects on a reflection if a breeze is disturbing a puddle's surface.

6 Include people

Kids, or even adults, splashing around in wet-weather gear after the rain has stopped can also be very evocative of time and place.

worked really well with the muted greens and greys of the rest of the image.'

Other creative possibilities

You can also take interesting shots in the rain by capturing moving vehicles and the spray they create. Use a long lens to avoid getting splashed, and try shooting from an open window or upper floor of a multi-storey car park. If it's just too wet to venture out, consider photographing the window as a possible subject for cool abstracts.

'The secret here is to focus on droplets on the glass pane while throwing the landscape outside out of focus, so select a wide aperture,' notes Tony. 'By focusing precisely on the small cluster of drops, they serve as an informal prism of the landscape outside. If you try this, keep your lens parallel to the surface of the glass when taking the shot.'

AP



Once the rain has passed, you will notice that the colours are much more enhanced

◀ Lens hood

A lens hood is another useful accessory for keeping your lens dry, and it will also help to prevent flare when shooting in sunnier conditions. Lens hoods are also great for protecting your lens from bangs and scuffs as you're walking around.



◀ Golf umbrella holder

Golf umbrella holders are designed to be attached to a golf trolley, but some can be attached to your tripod when shooting in the rain – which, of course, will free up both hands for operating the camera.



◀ Decent waterproofs

There's no point keeping your lens dry if you're so wet and cold you can't concentrate. There's a huge range of waterproof gear for photographers, such as the well-regarded directional clothing from Paramo.

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Simeon Quarrie is known for his creativity and storytelling in both video and photography.

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Garden studio

Any garden can provide some superb wildlife photographic opportunities. **Paul Hobson** offers his tips and advice on how to turn yours into a haven for birds, insects and mammals

Even the scruffiest gardens are the hidden nature reserves of Britain. They are vitally important for our wildlife and it's not hard to plan and plant your garden to benefit both local wildlife as well as creating a superb outside studio for your photography.

A variety of species

When you add new plants you need to consider how they will benefit insects, birds and mammals. The best starting point is to add plants that provide a source of nectar and/or pollen throughout the year for bees, butterflies, moths and hoverflies. This means you will need

a variety of species that will flower from spring through to autumn. Some species, like sunflowers, are annuals, so may need replanting each year. However, other species, like ivy and fruit trees, are perennials and live for years, so will need careful positioning. Many plants are multi-purpose and provide nectar and pollen-rich flowers for insects, leaves for caterpillars, as well as fruit and seeds later in the year for birds and mammals. Ivy and apple trees are classic examples.

The best way to start is with a plan of your garden on paper. Think where the sun is positioned throughout the year and remember that it changes over the seasons. The next thing is to consider where you will be doing your photography, so you can plan your backgrounds and think about what to plant in each position. To improve your backgrounds, contemplate using raised beds or even planting species in

Planting nectar-rich bushes like buddleia are excellent for attracting butterflies such as the comma





POTENTIAL PLANTS

Plant name	Season	Attracts
Forget-me-not	Spring	Pollen for insects
Alyssum	Spring	Pollen for insects
Aubrietia	Spring	Pollen for insects
Apple/pears/crab apple	Spring flowers, autumn fruits	Pollen for insects, fruit for birds, leaves for caterpillars
Teasel	Summer flowers, autumn seeds	Pollen for insects, fruit for birds
Honeysuckle	Summer-autumn	Pollen for insects
Holly	Summer	Pollen for insects, fruit for birds, leaves for caterpillars
Ivy	Summer flowers, autumn berries	Pollen for insects, fruit for birds, leaves for caterpillars
Foxglove	Summer	Pollen for insects
Cornflower	Summer	Pollen for insects
Sunflower	Summer-autumn	Pollen for insects, fruit for birds
Bramble	Summer flowers, autumn fruits	Pollen for insects, fruit for birds, leaves for caterpillars
Scabious	Summer-autumn	Pollen for insects
Sedum	Summer-autumn	Pollen for insects
Thyme	Summer	Pollen for insects
Buddleia	Summer-autumn	Pollen for insects

▶ pots, which can be moved to a better position when you want to begin shooting.

Attracting wildlife

Planting species that provide food is a key consideration, but you also need to think about cover and structure. Birds will benefit greatly from bushes that provide nesting opportunities as well as cover to avoid the sparrowhawks that will no doubt try their luck around your bird feeders.

Adding food is a tried-and-tested way to attract birds to your garden. Hanging feeders with sunflower hearts and peanuts will attract tits and great spotted woodpeckers. Feeders with smaller holes containing niger seeds will draw in goldfinches, while thrushes and wood mice will be enticed by old apples. Don't forget that many

Easy access

You may be lucky to have hedgehogs, foxes or badgers visiting your garden. They will also be foraging in a number of gardens around you. You need to make sure these animals have easy access, so if you have boxed-in your plot with fencing, cut a few holes in the bottom to allow them to move around freely.



I chose this shady corner to plant ivy for holly blue butterflies. They need ivy and holly leaves during the year. It is also a great place for red admiral butterflies, wasps and hoverflies

'Many wildlife enthusiasts think the single most important thing you can add to a garden is a pond'

don't need to be giant ornamental affairs. A small plastic pond costs about £50 and can be sunk easily into one corner of a garden. Try to site it in good sunlight and think carefully about how you will use it for photography. A good tip is to keep the edges raised slightly above the level of the ground and use earth and plants to create a gradient rising to the edge. This means you can photograph across the water level and get nicer backgrounds. Add a clump of frog spawn and some weeds from a local pond and you will have hours of fun photographing the pond during the summer. If you keep a stone just below the surface in the shallow end you will get birds drinking from it regularly.

A few other simple tips will help to boost wildlife opportunities. Never use any chemicals, just live with the slugs and snails (which are brilliant subjects anyway); create a compost heap where you put all your vegetable kitchen waste and garden prunings; build or buy bird-nest boxes and bee homes; create a mini meadow (if you have the space) with British wildflowers; leave weedy corners, or even plant a few beneficial weeds like nettles (great



By leaving old props around the garden many birds get used to them. It may be a bit hackneyed, but it's still a popular image

for red admiral and peacock butterflies) and rosebay willowherb (good for elephant hawk-moths); have an area of sunny, bare earth for tawny mining bees, which you never dig, just weed occasionally; if you have any bare walls add a trellis and plant a cover plant like clematis, ivy or honeysuckle – this will provide cover for birds and is excellent insect food.

mammals are nocturnal – scattered chop bones or bits of chicken will hopefully lure your local fox. I sprinkle a couple of handfuls of peanuts out each evening because I am lucky enough to get the occasional visit from a badger. It also means I have a good population of wood mice in my garden.

Trees and ponds

A vertical structure is considered very good for birds, so if you can add a tree or two this will be beneficial. Try to use native species like crab apple or birch, which are also food plants for many moth caterpillars. These help to provide food for small nesting birds like robins, and the moths will be very attractive to any bats that may pay your garden a visit.

Many wildlife enthusiasts think the single most important thing you can add to a garden is a pond. These



➤ Building a hide

Having your own hide can be a great way to shoot wildlife in your garden and there are a number of options, depending on how permanent you want the hide to be. If you only intend to photograph on the odd day, then a simple pop-up chair hide will suffice. Most garden birds won't balk at a new hide, so you can simply pop it up when you want to shoot. If you want a more permanent affair, think about building a small wooden hide out of timber and waterproof plywood.

An alternative is to buy a small shed and place this in your chosen position (think about background and direction of light). You can remove a window and replace it with scrim, or cut a hole into a wall for your lens. Another idea, which is really a halfway solution, is to make or buy a screen with a viewing hole and lens hole cut into it. If you are practically minded, you could even weave one yourself from willow shoots. When you site your hide try to get the background as far away as possible and avoid any plants with shiny leaves, like holly, which can create horrible hot spots in your images.

Grape hyacinths are a good small spring flower for bees



Paul Hobson After more than 20 years as an environmental-science lecturer, Paul packed it all in to move into wildlife photography full time. He loves travelling around the world, but definitely prefers working in the UK – the demands on the photographer are harder, but the rewards greater. www.paulhobson.co.uk



Don't miss a thing

NEVER overlook what might be thought mundane – small snails, zebra spiders and woodlice can be remarkable subjects, and a little creative thought and lighting can produce some really fantastic images. Practice always makes perfect, so when you have some spare time use your macro lens with a variety of light sources such as a torch or fill-flash on a common subject such as a woodlouse (never use full flash on insects, as it can damage their eyes). Perfect backlighting and front lighting, and play with your white balance to create warm, appealing images. This practice will mean that when you start to work on more skittish insects, you will be able to make quick, knowledgeable decisions to create the lighting effects you want. I was able to use the low sun at the end of the day as backlighting on this woodlouse and by deliberately underexposing I have tried to create a moody effect.

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Evening Class

Photoshop guru **Martin Evening** sorts out your photo-editing and post-processing problems

How to recompose an image

IT SEEMS Des Gardner's intention here was to create a symmetrical composition. The image was shot with a 24-85mm zoom lens at 24mm, which allowed him to capture the widest angle of view. This also helped to add more depth. However, I reckon the photo should have

been shot from further back to include more of the surroundings. It could also have been composed better so the house appeared more central in the frame. The following steps show how I extended the canvas area to the right of the building and corrected the perspective.

Submit your images

Please see the 'Send us your pictures' section on page 3 for details or visit www.amateurphotographer.co.uk

BEFORE



AFTER



1 Prepare the image

The first step was to prepare the photograph for Content-Aware Scaling. I double-clicked the Background layer to convert this to a regular layer. I then selected the Crop tool and dragged outwards to add more canvas to the right of the picture. Lastly, I added an Alpha 1 channel mask to define the areas to be stretched [the Alpha 1 channel is shown in red].



2 Content-Aware Scale

Next, I made sure the composite RGB channel was selected. I then went to the Edit menu and chose Content-Aware Scale. This added a bounding box to the layer contents. I selected the pre-created Alpha 1 channel from the Protect menu in the Toolbar and dragged the right-side handle outwards. I then added a new layer and retouched out the cables using the Spot Healing brush.



3 Adjust the tone settings

I selected both layers, went to the Filter menu and chose 'Convert for Smart Filters'. This then allowed me to apply the Camera Raw filter as a Smart Object. Here, I added a Vertical Upright Lens Corrections adjustment to straighten the verticals and followed this by applying a Basic panel Auto Tone correction. I clicked OK to apply these adjustments and finally cropped the image in Photoshop.



BEFORE



How to change perspective

THIS photograph by Michael Greisman was captured using a zoom lens at the longest focal-length setting and caught a fleeting moment of the passengers in the back of a truck. The following steps show how I used the Basic panel controls in Camera Raw to compensate for the difference in tone between the light-coloured truck awning and the shaded interior. It was also a good image with which to demonstrate how, through the use of the Lens Corrections panel, it is possible to turn the back of the truck around to make it look as though the photograph had been taken more from directly behind the vehicle.



1 Apply Basic adjustments

I began by opening the image in Camera Raw and adjusted the Exposure and Contrast to lighten the image and reduce the contrast. I then took the Highlights slider to -99 to preserve as much highlight detail as possible and lightened the shadows using the Shadows slider. I adjusted the Clarity slider to add more midtone contrast.

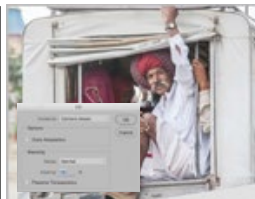


AFTER



2 Adjust the perspective

In this step I went to the Lens Corrections panel and applied an Auto Upright adjustment. I followed this by setting the Horizontal slider to -46, which helped make the back of the truck appear more 'straight on'. I then reduced the Scale to 91 and set the Aspect slider to +100 to compensate for the lateral stretching that had occurred.



3 Using Content-Aware Fill

The previous adjustment left an area of transparent pixels in the bottom-right corner. I opened the photo in Photoshop, made a selection of the transparent area and chose Select>Modify>Expand by 10 pixels. I then went to the Edit menu and chose Fill>Content-Aware Fill. This automatically filled the area with pixels sampled from the surrounding area.

Targeted Content-Aware Scaling

CONTENT-AWARE Scaling can be used to adjust the layout of a photograph, to change the image size or proportions and, at the same time, preserve the shape of key elements within the scene. This can be done in two ways. There is a Protect Skin Tones option in the Content-Aware Scaling mode toolbar that can automatically preserve the shape of key elements. It is designed to protect people from being distorted, but can work just as well with other image elements. Through the use of a carefully prepared

alpha channel mask you can target which areas you wish to distort more precisely. In the example below, I used a mask to define



the posts I wanted to get rid of and removed them by Content-Aware Scaling the image, dragging a side handle inwards.



Martin Evening is a noted expert in both photography and digital imaging. He is well known in London for his fashion and beauty work, for which he has won several awards. Martin has worked with the Adobe Photoshop and Adobe Lightroom engineering teams over many years and is one of the founding members of a software design company. Visit www.martinevening.com

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Befree Aluminum Travel Tripod	£119.00
Befree Carbon Fibre Travel Tripod	£248.00

MT190PRO3 Tripod	£129.00
MT05XPRO3 Tripod	£130.00
190Q0 Tripod	£149.00
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XP00 3 Way Geared Head	£149.00
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Profoto D1 Studio Kit 250/250 Air	£1,999.00
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Reader Portfolio

Spotlight on readers' excellent images and how they captured them



Brian Haslam, Devon



After several years as a wedding photographer, Brian decided to try his hand at tackling either macro flowers or landscapes. He eventually settled on the ample rewards of flowers, as his garden provides all the beautiful subjects he needs. To see more, visit www.brianhaslamphotography.co.uk.

Protea

1 By getting right in close, Brian has created an almost explosive fractal view of the flower's intricate inner workings
Canon EOS 5D Mark II, 100mm, 2secs at f/13, ISO 160

Anemones

2 The detail of this shot reveals the delicate creases of the petals against the strong form of the anemone's stamens
Canon EOS 5D Mark II, 100mm, 0.5sec at f/32, ISO 160



Tulips

This is a great example of Brian's forays into the realm of scanography
HP PSC 1200 scanner





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Magnolia

4 This is a perfectly captured portrait of a magnolia taken at Lanhydrock House, a National Trust property near Bodmin, Cornwall. The lighting is just right to bring out the subtle colours of the petals and the rich form of the centre
Canon EOS 5D, 100mm, 1/125sec at f/9, ISO 160

Dahlia 'Akita'

5 Brian has shot this dahlia against a black background in order to emphasise the redness of the flower. The lighting hitting the centre of the subject has brought out a strong focal point of blade-like petals
Canon EOS 5D Mark II, 100mm, 1/160sec at f/16, ISO 160

Garden Festival

6 The focus of this shot has meant that one flower drifts in the background against a pin-sharp one in front. As a result, we have an image of real depth
Canon EOS 5D Mark II, 100mm, 1/200sec at f/32, ISO 160

Erythronium

7 There's an almost painterly quality to this shot of an erythronium. The background is like the wash of a watercolour canvas. Notable also is the delicate form of the flower, which gives us a beautiful and captivating composition
Canon EOS 5D Mark II, 100mm, 1/160sec at f/5, ISO 400



Accessories

Useful gadgets to enhance your photography, from phones to filters...

Tenba Cooper 15 bag

£209 • www.tenba.com/uk

Callum McInerney-Riley tests a large messenger bag made for a big DSLR kit and laptop

At a glance

- Large messenger bag
- Houses large DSLR, 15in laptop and up to four lenses
- Made from peach-wax canvas and leather
- Special quiet Velcro allows users to open the bag silently
- Quick access from the top as well as a flap
- Water-repellent with included waterproof cover

RECENT business acquisitions have given Tenba some fresh lifeblood and, as a result, a number of fantastic new products have come to life, including the Tenba Cooper messenger bags. Our review tests the 15, the largest of four Cooper models. These grey-and-black bags are designed to house camera kits of varying sizes. The 15 is said to hold a DSLR up to pro size with a battery grip, and three to four lenses up to a 70–200mm f/2.8, as well as flash and accessories – so everything you're likely to need on a day's shooting. The '15' in the name indicates it can accommodate a 15in laptop in the rear compartment, which is padded, as is the main compartment. The latter is removable so the bag can also be used every day.

The exterior is constructed from soft peach-wax cotton canvas that's coated to make it water-resistant. The trim, details and base are made of leather with a pebble finish to give it more durability and style. Users can get to their kit by lifting the bag's flap, or there's a quick-access zip at the top. Inside is another zip for security and added weather-resistance.

Verdict

If you have a reasonable-sized DSLR kit and prefer a messenger bag over a backpack, the Tenba Cooper 15 is great. It's stylish, comfy to carry (although rather heavy when fully loaded) and offers a lot of protection for your kit. It's rather expensive, but I have a feeling the high-quality materials push up the price and I'd say with Tenba you really do get what you pay for.

Trolley strap

At the rear is a strap designed to allow users to slide their bag onto a roller case and keep them together – a great feature for travelling photographers.

Rain cover

Included with the bag is a waterproof rain cover. This is black on one side, and silver on the other to reflect the sun.

Expandable side pockets

On either side of the bag is a small pocket with a zip. When unzipped, these expand, allowing users to store items such as a water bottle or lens.

Amateur
Photographer
Testbench
Recommended
★★★★

WHERE IN THE RANGE

Tenba Cooper 8

£124, www.tenba.com/uk

The smallest in the Cooper range, the 8 is designed for a small mirrorless camera with two to three lenses plus flash and accessories.

There's also space for an iPad mini too.



Tenba Cooper 13 Slim

£164, www.tenba.com/uk

For the medium mirrorless kit, or even an entry-level DSLR kit, the 13 Slim has a lot to offer. It will house those with ease and has a special section for a laptop or tablet up to 13in.



Tenba Cooper 13 DSLR

£179, www.tenba.com/uk

For those with a large mirrorless kit, medium-sized DSLR or even those who need to carry lots of extra bits, the 13 DSLR offers more space over the Slim – and, of course, room for a 13in laptop.



This app will do the sums for you when shooting long exposures



Amateur
Photographer
Testbench
Recommended
★★★★

Exposure Calculator app

● Free ● play.google.com/store/apps

YOU DON'T need to be Sherlock Holmes to guess what Quicosoft's Exposure Calculator does, but just in case you missed a few lectures at detective school, this app is designed to calculate your image exposures. The idea is you can set the ISO, shutter speed and aperture that you are using and from there you can calculate what the shutter speed would be if you added an ND filter. However, you can also reverse that to calculate what the exposure would be if you were to put on a lower-strength ND filter or take off an ND filter altogether. Under Current Exposure, the bit where you put all your current parameters, there's a New Exposure option as well as Tracking Options. This allows users to tweak their ISO sensitivity setting or aperture to see what it would do to the shutter speed. Tracking Options simply resets it to the base parameters of the current exposure – effectively a reset mode. One of the best features of this app is that if you get an exposure longer than four seconds, a small timer will appear in the bottom right corner. This is linked with an alarm, too. So, if you happen to be shooting a 350-second exposure, it would calculate that in minutes and time it every step of the way, notifying you when the exposure should be finishing up. Pretty cool! For those shooting with ND filters – or, indeed, anybody shooting long exposures – this app is fantastic. It allows you to calculate everything and tweak stuff in one easy-to-use program with a great user-friendly interface. **Callum McInerney-Riley**



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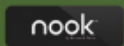
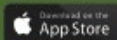


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Olympus Pen-F

Andy Westlake tests Olympus's retro-styled **Pen-F**, with its built-in viewfinder and 20.3-million-pixel sensor

For and against

- + Stunning styling and design make it a joy to use
- + Best image quality yet from a Four Thirds camera
- + Easy-to-adjust image-processing settings on a shot-by-shot basis
- Viewfinder is smaller than similarly priced competitors
- Confusing menu makes some features difficult to access
- No weather sealing

Where in the range



Olympus Pen E-PL7

Price £320 body only
This lower-end model in the flat-bodied Pen range features a 16-million-pixel sensor and tilting touchscreen.



Olympus OM-D E-M5 II

Price £770 body only
This offers a similar feature set to the Pen-F in a compact, weather-sealed, SLR-style body, with an older 16-million-pixel sensor.

Data file

Sensor	20.3MP Four Thirds Live MOS
Output size	5,184x3,888
Focal length mag	2x
Lens mount	Micro Four Thirds
Shutter speeds	60-1/8000sec; 60-1/16000sec electronic
ISO	ISO 80-25,600 (extended)
Exposure modes	PASM, iAuto, scene
Metering	324-zone ESP, spot, centre-weighted, highlight, shadow
Exposure comp	±3EV in 1/3 steps
Drive	10fps – 5fps with AF tracking
Movie	Full HD, 30, 25 or 24fps
LCD	3in, 1.04-million-dot fully articulated touchscreen
Viewfinder	2.36-million-dot OLED
AF points	81-point contrast detect AF
Memory card	SD, SDHC, SDXC
Power	BLN-1 rechargeable Li-ion
Battery life	330 shots (CIPA standard)
Dimensions	124.8x72.1x37.3mm
Weight	427g (with battery and card)

At a glance

- 20.3-million-pixel Four Thirds sensor
- ISO 80-25,600 (extended)
- 2.36-million-dot OLED EVF (0.62x magnification)
- 1.04-million-dot, 3in, fully articulated touchscreen
- 5-axis in-body image stabilisation
- 50-million-pixel high-resolution composite mode
- Price £999.99 (body only)

When Olympus launched its first compact system camera, the Pen E-P1 in 2009, it was keen to emphasise its heritage as a maker of small high-quality cameras, exemplified by its half-frame Pen models of the 1960s. Fast forward to 2016 and, with its latest model, it's specifically referencing the Pen F SLR, even going so far as to





Olympus's in-camera colour rendition is excellent. All the images in this review are JPEGs from the camera, with only minor adjustments for printing

borrow its name. A quick glance at the back of the camera gives a clue as to why: the Pen-F is first in this series of flat-bodied CSCs to include an electronic viewfinder.

With Olympus's popular SLR-like OM-D cameras already offering EVFs, you may well wonder what Olympus is doing here. At first sight the Pen-F doesn't seem radically different from the OM-D E-M5 II in terms of key specification, even lagging behind it in some areas. But where the OM-D places more emphasis on practicality, the Pen-F is all about style. However, in reality the design has little to do with its film namesake. Instead, the Pen-F pays homage to the legendary Leica III 35mm rangefinder.

It's not just style over substance, though, as the Pen-F has some more substantial charms. It's

Olympus's first Micro Four Thirds model to use a 20-million-pixel sensor, probably similar to the one that impressed us in the Panasonic Lumix DMC-GX8. It gains some ergonomic revisions, including a dedicated exposure-compensation dial (another first for Olympus). The Pen-F also makes it easy to exploit all the various in-camera JPEG processing settings, so you can tailor the look of each picture individually while you're shooting.

The Pen-F comes in a choice of finishes – either a discreet all-black version or the rather lovely, and very retro-looking, silver-and-black of our review sample. It can be bought body only for £999.99, or in two kits: either £1,099.99 with the compact 14–42mm electronic zoom lens, or £1,199.99 with the 17mm f/1.8 lens.

Features

Don't be fooled by the Pen-F's retro design – it is a thoroughly modern camera. Its 20.3-million-pixel Four Thirds sensor offers a standard sensitivity range of ISO 200–25,600, with an extended ISO 80 that gives lower noise, but risks clipping highlight detail.

Bursts of images can be captured at 10 frames per second with focus fixed, or 5 frames per second with refocusing between frames. Autofocus is handled by on-chip phase detection, with 81 selectable points arranged across almost the entire frame.

One of the Pen-F's biggest selling points is Olympus's in-body 5-axis image-stabilisation system, which works with every lens you can mount on the camera. It's remarkably effective for both stills and video shooting, and with all

kinds of lenses from wideangle to long telephoto. This matters because it can often offset the smaller Four Thirds sensor's noise-performance disadvantage compared with the APS-C sensors found in its competitors.

Video recording is available at full HD resolution and frame rates up to 60fps. A dedicated position on the mode dial gives access to lots of video-specific features, including full manual control of exposure, fast and slow-motion modes, and some unusual image effects. Wi-Fi is built in too, giving full remote control of the camera from a smartphone or tablet, along with the ability to copy images across for sharing.

In Olympus's usual fashion there's a whole slew of additional features hidden inside the Pen-F and mostly accessed





The Pen-F encourages you to experiment with in-camera processing to suit different lighting conditions

Creative controls

ONE Of the most unusual aspects of the Pen-F is the way it places control over the JPEG processing settings literally at your fingertips, positively encouraging you to experiment with changing them on a shot-by-shot basis. To make the most of this, Olympus offers huge scope for manipulating your images. Aside from the usual set of colour presets for different kinds of subject, it also has Olympus's signature 'art filters' that

provide a variety of heavily processed looks such as toy camera or grainy film, alongside 'color creator', which adds a user-controllable tint to the image using an intuitive on-screen interface.

Two entirely new modes also make their entrance – one for colour, and one for black & white. Each offers a choice of three distinctly different looks as a start point, accessed from the on-screen Super Control Panel. The colour

mode allows individual hues to be enhanced and suppressed at will, for example by accentuating blues while desaturating reds. Meanwhile, the mono mode lets you adjust the tonality of your images by mimicking the effect of using colour filters with black & white film, and adding vignetting and film-grain effects.

To achieve this, Olympus has added two new controls to the Pen-F. A dial on the camera's front selects the processing mode, and a thumb lever beneath the exposure mode dial gives quick access to the various settings. These are then changed using the electronic control dials, while being previewed live in the viewfinder or on the LCD. In practice, I found it mostly works very well, and encourages a completely different type of creativity while shooting.

If you're the kind of photographer who religiously shoots everything in raw for working up later, this will probably look like a superfluous frippery. However, if you enjoy manipulating your images in-camera and don't have the time or inclination to sit in front of a computer post-processing, it's a really interesting approach and one I've certainly enjoyed using. Best of all, you can shoot raw files alongside your filtered images and reprocess them later if you change your mind, either in-camera or on the computer.



from the 'Shooting menu 2'.

Here you'll find an array of bracketing options, including exposure and focus bracketing; high dynamic range shooting; keystone correction for fixing converging verticals in-camera; and electronic first curtain and fully electronic shutter modes. The mechanical shutter operates with a quiet 'snick', while the electronic option is silent.

Also on board is Olympus's unique High Res shot, which combines eight exposures while moving the sensor fractionally between each to generate a 50-million-pixel image. This requires the camera to be mounted on a tripod and the subject not to move at all during the process. Unfortunately, I found it more prone to giving image artefacts on the Pen-F compared with the OM-D E-M5 II, even when taking all possible precautions to avoid them.

Build and handling

The Pen-F is a stunning-looking camera, and its build quality certainly lives up to expectations. The all-metal body feels solid and robust, with the engraved top-plate adding a touch of class. All the dials have a beautifully

millid finish and click precisely as they're turned. Even the film-rewind-esque power switch is a miniature work of art. While there's no front grip, a deeply recessed thumb grip on the back gives a secure hold, aided by the non-slip leatherette covering.

Olympus has included a dedicated exposure-compensation dial that's easy to turn with your thumb while looking through the viewfinder, but difficult to knock accidentally (a feat most other manufacturers find difficult to emulate). This works with front and rear electronic control dials that can be customised for each exposure mode. For example, I set the rear dial to change ISO directly in aperture priority, which is my most-used mode. Overall, the Pen-F is probably the best Olympus camera yet to shoot with.

The touchscreen can be used for certain operations, such as to reposition the focus point while shooting. Being a left-eyed user, I didn't get on with this when using the viewfinder, as I found myself inadvertently resetting the focus point with my nose (right-eyed shooters should have no such trouble). Instead, I reconfigured the D-pad to move the focus area. It's a little small and not as quick



In this shot I used in-camera keystone compensation to correct converging verticals



Among Olympus's art filters are three 'vintage' looks – this is one of them

as the touchscreen could be, but it worked fine for me. This is the great advantage of having such a customisable camera: you have a lot of scope to set it up to suit you.

While Olympus suggests the Pen-F is best suited to shooting with small primes, I tried it with a wide range of lenses up to the Olympus 40-150mm f/2.8 Pro and found that in reality, it worked just fine with all of them.

Compared with previous Pen models, it works a lot better with telephotos due to the built-in EVF. However, I'd say the SLR-like form of the OM-D range does give more balanced handling with heavier lenses. A more pressing practical issue is the tripod socket, which is placed right at the front of the body adjacent to the lens mount, that itself is placed at the bottom of the body. As a result, even slightly larger lenses such as the Olympus 12-40mm f/2.8 Pro can block many quick-release plates from screwing on properly. Here the optional ECG-4 handgrip should help, as it has a built-in Arca Swiss dovetail plate running along the base, but at £109.99 it's a costly solution.

Olympus's menus aren't so great, being huge, labyrinthine and often incomprehensible. The result is an incredibly well-featured and customisable camera, but one that often feels almost impossible to master.

For example, those who enjoy shooting with third-party optics using mount adapters will appreciate that it's now possible to

programme each of your lenses into the camera, with the lens name recorded into the EXIF and the focal length fed to the IS system. This function can be assigned to a custom button for easy recall and I set it up as part of a custom set-up on the mode dial, with the depth of field preview button reassigned to activate focus peaking. Unfortunately, though, Olympus has buried all these options deep in the menu, making them uncommonly difficult for new users to configure.

Viewfinder and screen

The Pen-F offers a choice of two viewing options: either the built-in EVF or the fully articulated touchscreen. The viewfinder is a 2.36-million-dot unit with 100% coverage and 0.62x magnification. It includes Olympus's adaptive brightness technology that adapts the display to match the ambient lighting conditions. It's bright and clear, and almost identical to the EVF in the OM-D E-M10 II. This means that it's noticeably smaller than those in the E-M1 and E-M5 II, but that's the price you pay for the more compact body design.

By default, the finder is designed to preview the camera's image processing and exposure settings but, if you prefer, it can be set to a neutral rendition using the 'simulated optical viewfinder' mode. Thanks to the relatively large circular eyecup, it's a bit less susceptible to being overpowered by oblique

Focal points

The Pen-F's deceptively retro body conceals a thoroughly modern, well-featured camera

Tripod mount

This is placed in line with the lens axis but right at the front of the camera body, which can cause problems with some lenses and quick-release plates.

Battery

With the same BLN-1 as other high-end Olympus CSCs, the Pen-F is rated for 330 shots per charge.

Connectors

A flap on the handgrip covers a micro HDMI port alongside Olympus's proprietary USB/remote release socket.

Locking-mode dial

A button in the middle of the mode dial can be pressed down to lock it in place.

Stereo microphones

Built-in mics in front of the hotshoe capture sound for video. There's no option to attach an external microphone.



Hotshoe

There's no built-in flash, but included in the box is the compact hotshoe-fitting FL-LM3 flash unit with a bounce-and-swivel head.

Cable release

The shutter button is threaded to accept an old-fashioned mechanical release cable.

Articulated touchscreen

This side-hinged unit can be set to almost any angle: facing up, down or forwards.

EVF eye sensor

This allows automatic switchover from the LCD to EVF when you lift your camera to the eye.





Olympus's grainy film mode is great for moody black & white shooting

☛ sunlight than the corner-mounted finders on some similar cameras.

The rear screen is similarly excellent. It's a 1.04-million-dot LCD that can be set for waist-level or overhead shooting when photographing in both portrait and landscape formats. As with the EVF, you can overlay lots of useful shooting information, including a live histogram, gridline and electronic levels. The choice of these two viewing methods gives a great degree of flexibility during shooting. I spent most of my time using the viewfinder, but switched to the LCD for tripod work or to get shots at awkward angles.

Autofocus

Like most modern CSCs, the Pen-F focuses quickly and decisively in anything but the lowest light and, with most lenses, silently. Using the touchpad (or D-pad) you can place the AF area almost anywhere in the frame, and the camera will achieve accurate focus even with large-aperture lenses. When taking pictures of people, turning on face and eye-detection allows the camera to do all the hard work, so you can concentrate on composition.

Manual focus is straightforward, too. The camera offers a peaking display that highlights in-focus areas of the scene, or a magnified view of your chosen focus area (at levels ranging from 3x to 14x). While the latter is more accurate for really precise focusing, the magnify button isn't all that easy to locate by touch alone when you're using the viewfinder.

Performance

Metering uses the main image sensor, which means it's generally

very accurate, giving a well-judged balance between highlight and shadow detail. By default your exposure is previewed in the viewfinder, so on the rare occasion the camera gets things wrong, you can see before even taking the shot. This means that the exposure-compensation dial becomes more of a creative control than a means of second-guessing likely exposure errors. Alternatively, spot metering can be used in tricky conditions, with Olympus providing unusual shadow and highlight-weighted modes.

Image quality from the 20.3-million-pixel Four Thirds sensor is really rather good, giving easily sufficient resolution for a highly detailed A3 print when shooting at low ISOs. However, high ISO image quality inevitably can't match cameras with larger sensors. Loss of fine detail becomes visible at ISO 800 and I'd avoid shooting much higher than ISO 3,200 unless there's no other option. However, one great advantage of Micro Four Thirds is that you can buy small, relatively inexpensive fast primes such as the Olympus 17mm f/1.8, 25mm f/1.8 and 45mm f/1.8 which, together with the excellent in-body image stabilisation, reduce the need to shoot at very high ISO settings.

When it comes to camera JPEGs, Olympus's excellent colour rendition and auto white balance come to the fore. Combined with the accurate metering, this means that the files produced by the camera are very attractive indeed. Some might find the noise reduction a bit over-enthusiastic by default, but this can be turned down using the Noise Filter setting in the menu.

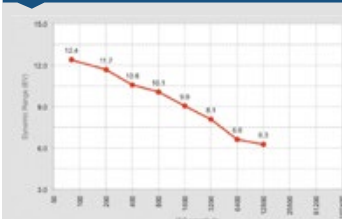


Lab results

Andrew Sydenham's lab tests reveal just how the camera performs

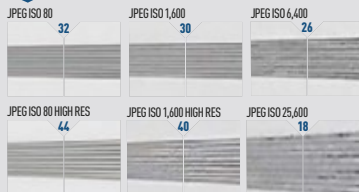
WITH its new 20-million-pixel sensor, the Pen-F promises improved image quality compared with older Olympus models, although it can't quite match the latest 24-million-pixel APS-C sensors for raw image quality. We don't yet have access to any third-party raw-conversion software that supports the camera, so we have to base our analysis on Olympus's own processing. The overall improvements look similar to those we saw from the Panasonic Lumix DMC-GX8, which we assume uses the same sensor. High ISO noise appears to be slightly improved, and there's perhaps a bit more scope for pulling extra detail from shadow regions of the image before noise becomes a problem. Most importantly, however, there are no apparent disadvantages from the increased pixel count.

Dynamic range



The Pen-F acquires itself pretty well in our Applied Imaging dynamic range tests, giving broadly similar results to the Panasonic GX8. Low ISO dynamic range is very good, being in the vicinity of 12 stops, but the numbers fall fairly quickly as the ISO is raised, to around 10EV at ISO 800. A reading of 8.1EV at ISO 3,200 is on the edge of acceptability, and sub-7EV measurements at the top two settings reinforce that they're best avoided whenever possible.

Resolution



In JPEG mode the Pen-F resolves around 3,200lp/ph in our tests, using the Olympus 60mm f/2.8 macro at f/4. This isn't radically different from the 16MP OM-D E-M5 II and lags a bit behind the Panasonic GX8, but I'd expect the gap to disappear in raw. Resolution initially drops only slowly as the sensitivity is raised, to about 3,000lp/ph at ISO 1600. Beyond this it plummets more rapidly, to around 2,500lp/ph at ISO 6,400 and barely 1,800lp/ph at ISO 25,600. Switch to the high-resolution composite mode and around 4,000lp/ph is achieved at ISO 80 (which is lower than we'd expect), dropping to 4,000lp/ph at ISO 1,600.



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Noise

Both raw and JPEG images taken from our diorama scene are captured at the full range of ISO settings. The camera is placed in its default setting for JPEG images. Raw images are sharpened and noise reduction applied, to strike the best balance between resolution and noise.



JPEG ISO 80



JPEG ISO 1,600



JPEG ISO 12,800



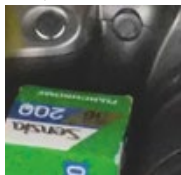
JPEG ISO 400



JPEG ISO 4,000



JPEG ISO 25,600



At its ISO 200 base, the Pen-F gives finely detailed images with little visible noise and very attractive colour rendition. Switch to the extended 'Low' (ISO 80) setting and the images are even cleaner, although highlights clip to white visibly sooner, so this is best used only in low contrast situations. Increase the sensitivity and while ISO 400 is still eminently usable, fine detail starts to smear by ISO 1,600, although colour is still retained very well. I'd happily shoot up to ISO 3,200 for less critical work but beyond this things get marginal, and at ISO 6,400 almost all fine detail has disappeared. There's also strong luminance noise even in midtones, with shadow regions blocking up to black almost completely. The top two settings are best avoided unless there's no other choice.

The competition



Panasonic Lumix DMC-GX8

Price £699 (body only)

Sensor 20.3MP Four Thirds

ISO 100-25,600 (extended)

A very similar camera to the Pen-F, the GX8 also has 20.3-million-pixel sensor, in-body image stabilisation and a fully articulating touchscreen. It's also weather sealed, can record 4K video and the built-in EVF tilts 90° upwards, but it's rather bulkier.

Sony Alpha 6300

Price £899 (body only)

Sensor 24.2MP APS-C

ISO 100-51,200 (extended)

The brand-new Alpha 6300 is, on paper, one of the most sophisticated CSCs yet, with an extraordinary 425-point AF system built into its 24.2MP sensor. It has a tilting rear screen, 2.36-million-dot EVF, weatherproofing and 4K video on board.

Fujifilm X-Pro2

Price £1,349 (body only)

Sensor 24.3MP APS-C

ISO 100-51,200 (extended)

Fujifilm's flagship camera uses a hybrid optical/electronic viewfinder for a unique take on the digital rangefinder experience. Its 24.3-million-pixel X-Trans CMOS sensor provides excellent image quality, particularly at high ISO settings.

Our verdict

WITH the Pen-F, Olympus has come up with a rare thing in today's market: a camera that has a distinct personality of its own. It's perhaps not one that you'd choose on a rational analysis of specification and value for money. Instead, it's one that fires up your creative juices, and simply begs to be picked up and used. There may be technically better cameras on the market, but it's hard to think of one that's better designed.

When it comes to raw image quality, it's certainly true that you can get more for the £1,000 that the Pen-F body will cost you. However, I'm not sure this matters. Speaking as a camera reviewer, it's all too easy to get carried away with the latest and greatest technology, and forget that image making isn't just about sensor characteristics such as resolution and dynamic range (however useful they may be). The Pen-F offers its own somewhat idiosyncratic take on creativity, with the ability to generate a

near-infinite variety of filtered looks that are previewed live in the viewfinder. What's more, very few of its competitors make JPEG images that look as nice straight out of the camera, with the new customisable colour and mono modes trumping even the rest of the Olympus range.

The Pen-F is also a very portable camera, with its flat-topped design easier to slip into a bag than SLR-style cameras such as its OM-D siblings. With Olympus's compact lenses, and particularly its f/1.8 primes, you can carry a very capable kit in a small bag. It handles really well, too, especially if you take a moment or two to set it up to suit your personal preferences. Overall, I've become very enamoured of the Pen-F over the time I've been using it, and there are few cameras I've been more reluctant to hand back at the end of a loan spell. Quite simply, it's a beautiful design that's capable of producing some lovely images.



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Shooting towards the sun revealed lens flare in a few of the images

Samyang 50mm f/1.2 AS UMC CS

Does Samyang's fast prime for mirrorless cameras represent a bargain at under £300?

Michael Topham gives it a thorough test

When I reviewed the Samyang 21mm f/1.4 ED AS UMC CS in AP 20 February, I also referred to the Samyang 50mm f/1.2 AS UMC CS – a lens that, like the 21mm f/1.4, has been designed with today's mirrorless users in mind. Both lenses arrived in the office within the space of a week of each other, and having been blown away by the image quality performance of the 21mm f/1.4, I was eager to break Samyang's 50mm f/1.2 out of its box to discover if it was just as good.

To recap, the 50mm f/1.2 AS UMC CS is one of a pair of manual focus lenses to have been

recently added to Samyang's mirrorless line-up. It is available in four mirrorless camera mounts catering for Canon EF-M, Fujifilm X, Micro Four Thirds and Sony E-mount users. The main appeal of this lens is its bright f/1.2 aperture and its price, which, at under £300, seems a bargain.

We're used to seeing fast f/1.2 primes fetching prices around four figures, so it's refreshing to see a more affordable example being made for those who own smaller compact system cameras. Mounted to a mirrorless camera with an APS-C sized sensor, this lens is equivalent to 75mm, whereas it's

comparable to a 80mm fixed lens attached to a Canon EF-M mount camera and a 100mm fixed lens on Micro Four Thirds. Whatever system this lens is used with, it will appeal to photographers who would like to shoot close-cropped portraits or other subjects requiring a short, fast telephoto lens.





This shot was taken at the lens's minimum focus distance with the aperture set to f/1.2

Features

➤ This lens has a different internal construction from the 21mm f/1.4 ED AS UMC CS lens we reviewed in February. Rather than employing an arrangement of eight elements in seven groups, this lens features a construction of nine elements in seven groups. The lens benefits from a nine-blade aperture to ensure out-of-focus points of lights (or bokeh) are portrayed circular. It's possible to make out these nine aperture blades when you peer down the barrel of the lens and rotate the aperture ring across its f/1.2-f/16 range.

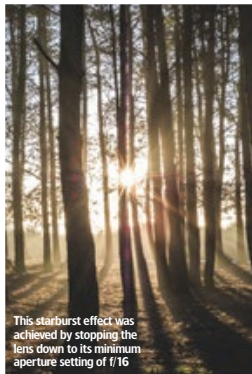
To minimise colour aberrations and ensure the highest contrast across the frame at all apertures, the Samyang features two aspherical lenses. These are abbreviated to AS in its product name. The UMC abbreviation that follows refers to Samyang's ultra-multi-coating technology, which is applied to optimise light transmission and minimise unwanted artefacts such as internal reflections, flare and ghosting.

As mentioned earlier, the lens is manual-focus only and features no optical stabilisation to counteract the effects of handshake. The lack of autofocus and optical stabilisation won't satisfy all users, but their absence does have the advantage of helping to keep the lens reasonably lightweight. On the scales it's 95g heavier than Samyang's wider 21mm f/1.4 prime lens, but still weighs less than 400g, which is impressive for a lens that feels solidly built with a fast f/1.2 aperture.

At the rear, the lens employs a good-quality metal mount, but there are no metal contacts to form an electronic connection between the camera and lens, meaning the EXIF data recorded by the camera won't offer any

information about the focal length or aperture used. If you'd like to keep a record of your aperture settings, you'll need to put pen to paper much like I did throughout my testing.

The filter thread doesn't rotate when the manual-focus ring is turned, but users should be aware that the front element does move back and forth. The lens comes supplied with a detachable circular-shaped lens hood that secures with a reassuring click, and it's possible to reverse it when storing the lens in a bag. For those who'd like to know how close they can focus, it has a 50cm minimum focus distance.



This starburst effect was achieved by stopping the lens down to its minimum aperture setting of f/16

'The aperture ring notches and clicks when it's rotated'

Build and handling

First impressions out of the box are very good. For a lens under £300 you might imagine the build quality to be an area where compromises have been made, yet it feels reassuringly solid in the hand and is constructed to a standard that exceeds expectations. The plastic used on the outer barrel and filter thread is of high quality, but just as I mentioned when I reviewed the 21mm f/1.4, the focus and aperture rings could benefit from being rubberised to offer slightly more grip when it's used with gloves. When you're not wearing gloves, however, the finely grooved rings provide adequate grip and are easy to find from behind the camera.

The aperture ring notches and clicks when it's rotated, and users are provided with 1/2-stop adjustment between the aperture settings, meaning it's easy enough to locate f/1.8 between f/1.4 and f/2, for example. If you shoot more video than you do stills, Samyang also produces a de-clicked version of the lens in the form of the 50mm T1.3 AS UMC CS Cine (£329), which has an identical optical design and is available in the same lens mounts.

The manual-focus ring offers a consistently smooth motion across the focus range, but switching over to the 21mm f/1.4 and back again made me realise that the manual-focus ring on this lens has greater resistance and requires slightly more effort to turn. For the purpose of testing, I coupled our X-mount sample to the Fujifilm X-Pro2 with which it felt well matched and nicely balanced during a prolonged spell of shooting. It's a lens that,



Purple fringing was traced along high-contrast edges when the widest aperture setting ($f/1.2$) was used

from my experience, feels best paired with larger mirrorless models. When I paired it with the petite Fujifilm X-T10 it had a tendency to make the camera feel more front heavy and not quite as well balanced.

The aperture settings and focus-distance markings are printed on the barrel rather than engraved, but didn't appear to rub off easily when they were scratched with my fingers.

Image quality

To achieve optimum focus with this lens you'll either have to rely on the judgment of your eyes or put your camera's manual-focus assist settings to good use. I discovered my sharpest results were captured using focus peaking in combination with a magnified screen view. This approach was quickly adopted for a majority of the test images that support this review, but with such a fine margin for error at $f/1.2$ I found myself stopping down to $f/1.8$ - $f/2.8$ quite frequently.

Our lab results confirmed my real-world findings and at $f/1.2$ the sharpness at the corner of the frame is virtually identical to that at the centre. To achieve optimum sharpness from this lens you'll want to close it down by a stop or two. Centre sharpness improves considerably between $f/2$ and $f/2.8$, and the sweet spot between centre and corner sharpness is found close to $f/4$. Acceptable images can be produced between $f/4$ and $f/11$, beyond which diffraction starts to take its toll on sharpness. Corner shading was observed in images taken at its widest aperture settings, but things quickly improve when the lens is closed to $f/2$ and $f/2.8$.

A close inspection of images taken towards the light revealed some minor purple fringing along branches and high-contrast edges. This was a relatively easy fix in Lightroom. Our distortion chart reveals the lens renders straight lines well, with no evidence of barrel or pincushion distortion.



Our verdict

THE APPEAL of this lens lies in its incredibly fast aperture which, combined with its focal length, can produce stunning results with a super-shallow depth of field. For mirrorless users with a passion for portraiture or other subjects where a fast telephoto zoom is advantageous, it represents excellent value and there's nothing to suggest it won't last a lifetime in the hands of those who care for it.

It's not ideal for all subjects and situations, though, and you'll want to ask yourself whether you're prepared to spend time refining focus manually rather than letting an autofocus system carry out the hard work for you. If the subjects you photograph move erratically and you can't control their speed, position or direction, you're likely to struggle to find focus fast enough, which could result in unusable out-of-focus shots.

If your subject is static, or you know you have time to perfect your focus settings, you'll have nothing to worry about, and the smooth focus ring of the lens makes the user experience enjoyable.



Data file

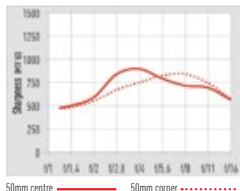
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Filter diameter 62mm
Lens elements 9
Groups 7
Aperture $f/1.4$ - $f/16$
Minimum focus 50cm
Length 74.5mm
Diameter 67.5mm
Weight 380g



Samyang 50mm $f/1.2$ AS UMC CS

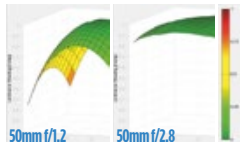
Resolution

Our Applied Imaging tests tell us the sharpness is comparable at the corners and the centre at $f/1.2$. There's a noticeable spike in sharpness in the centre between $f/2$ and $f/2.8$, with the sweet spot of sharpness at the centre and edge being located close to $f/4$. Close the lens down beyond $f/4$ and the centre sharpness starts to drop a little, but acceptable sharpness is maintained up to $f/11$.



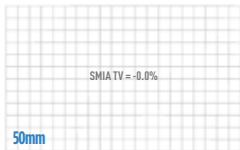
Shading

Corners appear approximately 0.7EV darker than the centre of the image at $f/1.2$. This is impressive for such a fast prime, and corner shading is quick to disappear when it's closed down. There is an obvious improvement at $f/1.4$, and by the time you reach $f/2$ edges are 0.3EV darker than the centre. Vignetting won't be an issue between $f/2.8$ and $f/16$.



Curvilinear distortion

A close study of our distortion chart reveals the lens puts in a great performance, and compared with the Samyang 21mm $f/1.4$, which displayed minor barrel distortion in its images, this lens renders horizontal and vertical lines straight with no obvious signs of barrel or pincushion distortion.



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Understanding diffraction

Q I am struggling with the idea of diffraction. As I understand it, this is an optical property of the lens that increases in its blurring effect as the aperture is closed down. However, I've also read that cameras using sensors with more megapixels reach a 'diffraction limit' at larger apertures, but if diffraction is due solely to the lens, how can the sensor have any influence over its effect? **Gary Chambers**

A These apparently contradictory positions are the result of looking at things in two different ways. If we think in terms of the image as a whole, then the effects of diffraction are completely unaffected by the sensor resolution. In practice this means that, if we were to make the same-sized print using two cameras with sensors of different resolution, using the same lens and exposure settings on each, then diffraction blurring would affect both cameras equally at small apertures. You should never get a worse print from the higher-resolution sensor, but you can potentially get a more detailed one.

However, if we instead consider things on the pixel level, the situation changes slightly. Now, diffraction becomes visible with the higher resolution sensor at larger apertures. While this is sometimes called a 'diffraction limit', it absolutely doesn't mean that you shouldn't use smaller apertures – just that the finest detail will start to look a bit softer if you stare really closely. It may well be far more advantageous to the image as a whole to stop down further for additional depth of field, and accept the consequent minor blurring of the very finest detail.

Conceptually, this second comparison is equivalent to making a larger print from the higher-resolution camera, in proportion to its increased pixel count (so, for example, printing a 36-million-pixel image at twice the size of an 18-million-pixel one). In this case, diffraction blurring will result in fine detail starting to soften visibly at larger apertures on the larger print, compared with the smaller one. However, at this point we're not really comparing apples with apples anyway. Buying a camera with a higher-resolution sensor obviously doesn't compel you to make larger prints every single time.

Andy Westlake



Prints should last decades without fading when stored in albums

Backup paranoia

Q I have some questions about the longevity of prints. I have my prints processed at a lab in batches of 50. The prints are done locally and are marked Fuji Crystal Archive Paper on the back.

What process is the lab likely to be using to produce the prints? Are any of the current crop of home printers capable of producing prints that will stand the test of time if stored in albums? Finally, would you consider doing a test that would compare the longevity of different types of prints over time – for example, lab-produced vs laserprint vs inkjet? **John Mernin**

A Fujifilm Crystal Archive uses silver-halide technology, which is essentially the same process used for printing colour negative film. The three colour layers – yellow, cyan and magenta – are dye-based, but unlike inkjet prints they're protected by a clear top layer on the paper. According to Fujifilm, in terms of longevity, Crystal Archive is rated for about 50 years' storage in dark conditions.

As for home printers, everything comes down to the ink technology used. In general, specialist photo printers have inks designed for longer life than everyday office printers. For example, Epson claims a 300-year storage lifespan with the Claria HD dye inks in its Expression Photo XP-960. In principle, the pigment-based UltraChrome

Hi-Gloss2 inks in its SureColor SC-P400 could last even longer, because pigments are generally more stable than dyes.

However, inkjet printing hasn't been around all that long, so how can Epson claim a 300-year lifespan for an inkset that's only been in use for a few years?

These ratings are arrived at through 'accelerated ageing' tests that use exaggerated conditions to speed up the fading process, from which manufacturers can then attempt to predict storage lifespans under normal conditions. Certain assumptions have to be made to calculate this and any number of currently unknown factors might affect the real-world results.

This brings me to your third question. To do our own tests we'd have to make a set of prints using different technologies and attempt to replicate these accelerated ageing tests by exposing the prints to controlled, very high light levels for an extended period of time. Not surprisingly, how the final lifespan ratings are calculated is a trade secret and to get any kind of reasonable figure you'd need detailed understanding of the photochemical reaction that causes the degradation. None of this knowledge is public domain, so while we could see which prints lasted longer under the conditions we tested in, we wouldn't necessarily be able to predict how that might translate back to album storage. **Andy Westlake**

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Nikon D750 shutter issue

Q I traded in my Nikon D600 for a Nikon D750 after experiencing problems with the reported issue of dust and oil spots on the sensor. A friend at my camera club then told me there is a reported issue with the D750's shutter mechanism. Can you offer any more information on this and how I can get it resolved?
Nigel Whittaker

A The issue of some Nikon D750 shutter mechanisms not working correctly was first reported in July last year. Nikon admitted that the shutter had been known not to function normally, occasionally resulting in shading of a portion of the image. It said this issue would affect only D750 cameras that were made in

October and November 2014. However, last month it released a statement saying the same issue may occur with D750 cameras made between December 2014 and June 2015.



The D750's serial number can be found on the underside of the body

To find out if your D750 is affected, visit Nikon's D750 advisory web page (advisory.nikonrepair.eu/Language_Select_D750_2.aspx), where you'll be asked to select your language and input the seven-digit serial number on the underside of the camera body.

If your camera is one of those affected, you'll be asked to contact your nearest Nikon service centre. They will arrange for your D750 to be examined and repaired free of charge, even if the camera's warranty has expired. There's a huge backlog of cameras waiting to be put right, so don't expect a quick fix. It's also worth pointing out that there's a form you can complete to return your product, free, to a Nikon Service Centre. Visit nikoneurope-en.custhelp.com/app/answers/detail/a_id/64946.
Michael Topham

HOW IT WORKS

I am
your

Reflex mirror

I HAVE been around for centuries, but I really came into my own in the early 20th century. Although I am best known for being at the heart of single-lens reflex (SLR) cameras, I was also a fundamental part of twin-lens reflex (TLR) cameras. I am a reflex mirror.

The arrangement of a mirror placed behind a lens in order to project the light from the lens for the convenience of viewing has been used since

the 1600s in a camera obscura. Camera makers eventually miniaturised reflex mirror designs and the era of the TLR began in the 1880s, when such cameras became small enough to be handheld with the photographer viewing downwards at the waist-level viewfinder, where a view of the scene was projected by the top of two lenses. Underneath was the second lens that would expose the film.

However, it was the SLR camera that really propelled the success of the reflex mirror, with the first 35mm SLRs developed in the mid-1930s. The idea was similar to a TLR, except the camera only had one lens and the mirror was placed between the lens and the film plane.

The problem of the mirror being in the way of the film was solved in a couple of ways. In early designs the photographer had to manually lift the mirror before making the exposure. In later smaller cameras the mirror, hinged at the top, was spring-loaded and connected to the shutter-release mechanism and it flipped up before the shutter fired. But in early models the mirror had to be manually wound back down before you could take another shot. Eventually, we had the 'quick-return' mirror, which flipped back down as soon as the shutter had closed. However, this could not be operated particularly fast and it was quite loud.

To address these issues, fixed semi-silvered reflex mirrors were developed, also known as pellicles. Canon, in particular, made a number of pellicle mirror SLRs. Recently, Sony revived the semi-silvered mirror with its single lens translucent (SLT) alternative to the contemporary DSLR.

SLRs use a reflex mirror for viewing the image



BLAST FROM THE PAST

Nikon D3200

Ian Burley looks at a four-year-old bargain DSLR from Nikon

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WHILE Nikon launched the 24MP APS-C-sensor D3200 barely four years ago, it has become a significant camera in the used DSLR market. It has since been replaced by the D3300, but it is not a revolutionary update so remaining stocks of D3200s can offer very attractive savings over new D3300s.

What's good The D3200's specification remains impressive four years on. In many ways, its sensor remains superior to anything comparable from, for example, Canon. You get a respectable 4fps burst mode and 1080P full HD video shooting at 30, 25 or 24fps.

What's bad With such a good sensor, Nikon is guilty of not equipping the D3200 with the ability to produce in-camera JPEGs of deserving sharpness. The ISO 6,400 limit (12,800 in boost mode) seems an anachronism today. Autofocusing when using live view or video mode is far from ideal. The absence of built-in Wi-Fi is telling when compared to today's competition. There is no articulating screen or touchscreen operation.



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Professor Newman on...

The problem with problems

Bob Newman on why some quality issues cannot be foreseen

Reasonably regularly, most camera manufacturers have a problem requiring a product recall. This is in part due to the complexity of a modern camera. Humans not being infallible, the camera's designers fail to foresee the consequences of their design decisions. A good example of this was a problem affecting early examples of the very successful Nikon D750 [see page 65 of this issue]. I use this as an example because it is a problem Nikon has acknowledged and issued the requisite product recall, and not to suggest that the company is prone to such issues. In fact, every camera manufacturer has had at least one similar episode in the past few years.

The nature of the problem was that internal reflections from the autofocus sensor unit could cause glare in some cameras, in some circumstances. It's possible that the problem was a result of Nikon's decision to squeeze the dimensions of the camera, resulting in more constraints within the mirror box than there would be in its large full-frame cameras.

When the problem was

discovered, there was a lot of discussion criticising Nikon's quality control (QC). In fact, such problems have nothing to do with QC. Quality control is the process by which a manufacturer ensures that each example of the products it makes conforms to the designers' specifications. The reasons that one might not may be incorrect assembly, materials variation or issues with the manufacture of subcomponents.

Regulating the quality of a product by quality control at the end of production is the most expensive way to operate, since a product that is rejected has been through the entire manufacturing process. Also, determining what is 'good quality', without reference to a specification, is a difficult and skilled job, so having such inspectors is an expensive proposition. Also, some problems take time to become apparent.

For this reason, the favoured approach in modern industry is quality assurance (QA). This is the planning of the whole of the production cycle to ensure that quality is maintained at each stage,

with the theory being that if each stage of the production process conforms to the quality standards, then the end product must also. In Japanese industry this has evolved into a method called total quality management (TQM).

However, none of these approaches would have detected the problems affecting the D750. Apparently, the AF units were assembled in the body within the defined production tolerances but at one end of that tolerance range the unit protruded enough to cause the reflection flare problem in particular lighting conditions. To detect this before production started would have required extensive field testing, and some luck, in that the field test units would have been assembled at the wrong end of the tolerance range, and used by photographers shooting in certain light conditions. Buying an early production model of something as expensive as a camera carries the risk that there will be an unforeseen problem.



The Canon EOS-1D X and Nikon D750 suffered design problems that only became apparent after their release

Bob Newman is currently Professor of Computer Science at the University of Wolverhampton. He has been working with the design and development of high-technology equipment for 35 years and two of his products have won innovation awards. Bob is also a camera nut and a keen amateur photographer

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Final Analysis

Roger Hicks considers...

'Frederick Seaton at Home, Lackawanna, NY', 1989, by Les Krims



'The longer you look at it, the more there is to see and to think about'

Les Krims (born 1942) is a strange and brilliant photographer, well known for his surreal 'fictions'. When I first saw this image, I thought it might be one of them. It didn't seem right, though: it's not surreal enough, not fictitious enough, too crowded. As far as I have been able to discover, this is because it is, in fact, a straight shot of an actual artist at home – Frederick Seaton. His artwork is well worth seeing, and quite consistent with a room like this, although of course this picture was taken 27 years ago.

Initially two things puzzled me about this image and made me suspect it might not be a set-up. One was the self-consciousness of the sitter. The other was the lack of humour in the picture. The late Viv Stanshall could have worn this background like a suit of clothes, and the

picture would have made a great cover for a Bonzo Dog Doo-Dah Band album, whereas Seaton is trying just a little too hard to look cool. Furthermore, whatever he is holding does the composition no favours: he is 'Posing' with a capital 'P'.

To a considerable extent this room is a *Wunderkammer* – a cabinet of curiosities. The idea goes back to the 16th century at least: part library, part museum, part art gallery, part focus and locus for meditation and reflection. One of the many things that intrigues me about this photograph is that it is not only a picture of a *Wunderkammer* but to a considerable extent one in its own right. The longer you look at it, the more there is to see and to think about.

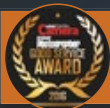
As one would expect from Krims, it is beautifully executed. Lighting such a jumble is not easy: ferocious shadows and grievous fall-off are hard to avoid.

Consider the colours: rich without being unnatural or garish. The only thing I don't know about, because I've never seen an original print, is sharpness. What does it look like as a big print? Could it stand enlargement?

This invites another question. How big does it need to be? One could metaphorically dive into a huge print, read every book title, try to decipher every detail and speculate on what it might mean. As a tiny print, though, it changes completely. It takes on a jewel-like quality and becomes an object that is itself fit to be in a *Wunderkammer*: potentially an infinite regression.

We no longer need to see detail: our mind supplies it. Sometimes a small print, by forcing us to invent or imagine things we cannot fully see, can be all the more magical.

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